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STATISTICS OF WISCONSIN PUBLIC UTILITIES

1982-1981-1980

ELECTRIC, GAS, TELEPHONE
WATER AND HEATING UTILITIES

PUBLIC SERVICE COMMISSION OF WISCONSIN

Accounts and Finance Division

Bulletin No. 8

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STATISTICS OF WISCONSIN PUBLIC UTILITIES

1982-1981-1980

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STATISTICS OF WISCONSIN PUBLIC UTILITIES

This bulletin presents a statistical summary of public utilities operating in Wisconsin during the period 1980-1982 inclusive. In addition, selected data over longer periods are shown in the text or portrayed in the charts. Some Wisconsin utilities have operations outside the State. These operations are generally excluded from the summaries but this was not possible in the case of financial data shown in Tables 1, 2, and 3.

The following table gives an indication of the relative importance of various utility services included in the report.

	Year Ending December 31, 1982		
	Average Number of Customers*#	Operating Revenues*	Net Operating Revenues*
Electric	1,864,635	$2,209,700,908	$392,633,662
Gas	1,069,452	1,555,760,819	63,581,445
Telephone	2,163,563	1,264,746,607	207,383,151
Water	931,647	136,138,528	12,708,093
Heating	703	11,461,606	1,569,684
		$5,177,808,468	$677,876,035

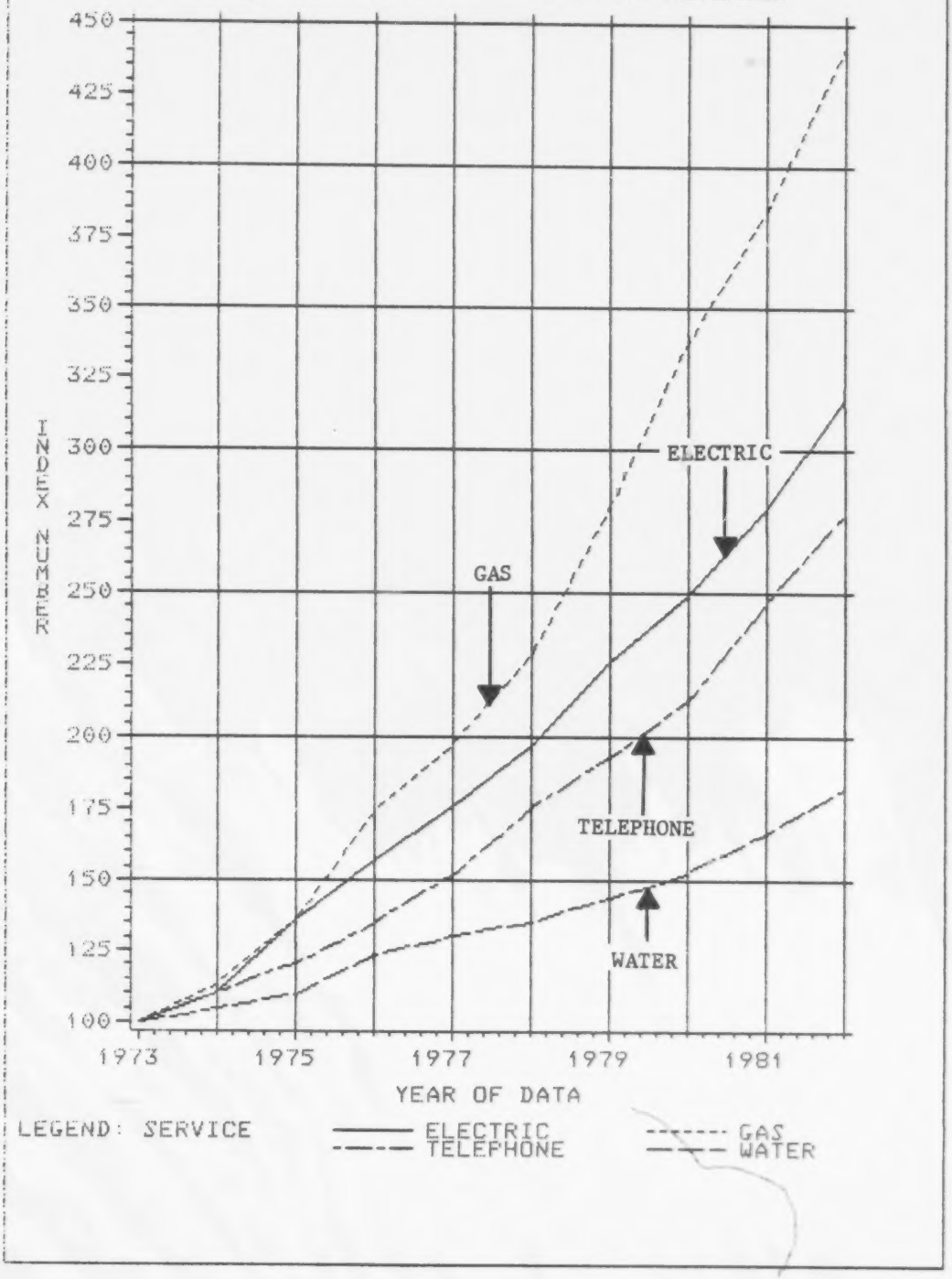
* Excludes out-of-state operations.
\# Ultimate retail consumers.

Chart 1 presents a comparison of trends in gross operating revenue since 1973. Gas utility revenues continue to have the greatest rate of growth with an increase of 4.4 times in 10 years. Electric and telephone revenues increased 3.2 and 2.8 times respectively while water revenues rose 1.8 times during the 10-year period. The increases are due to higher rates.

Chart 2 shows that since 1973, net operating telephone revenues have risen 2.4 times, electric revenues 3.0 times, water revenues 0.9 times, and gas revenues 1.6 times.

CHART 1

COMPARATIVE TRENDS OF OPERATING REVENUES



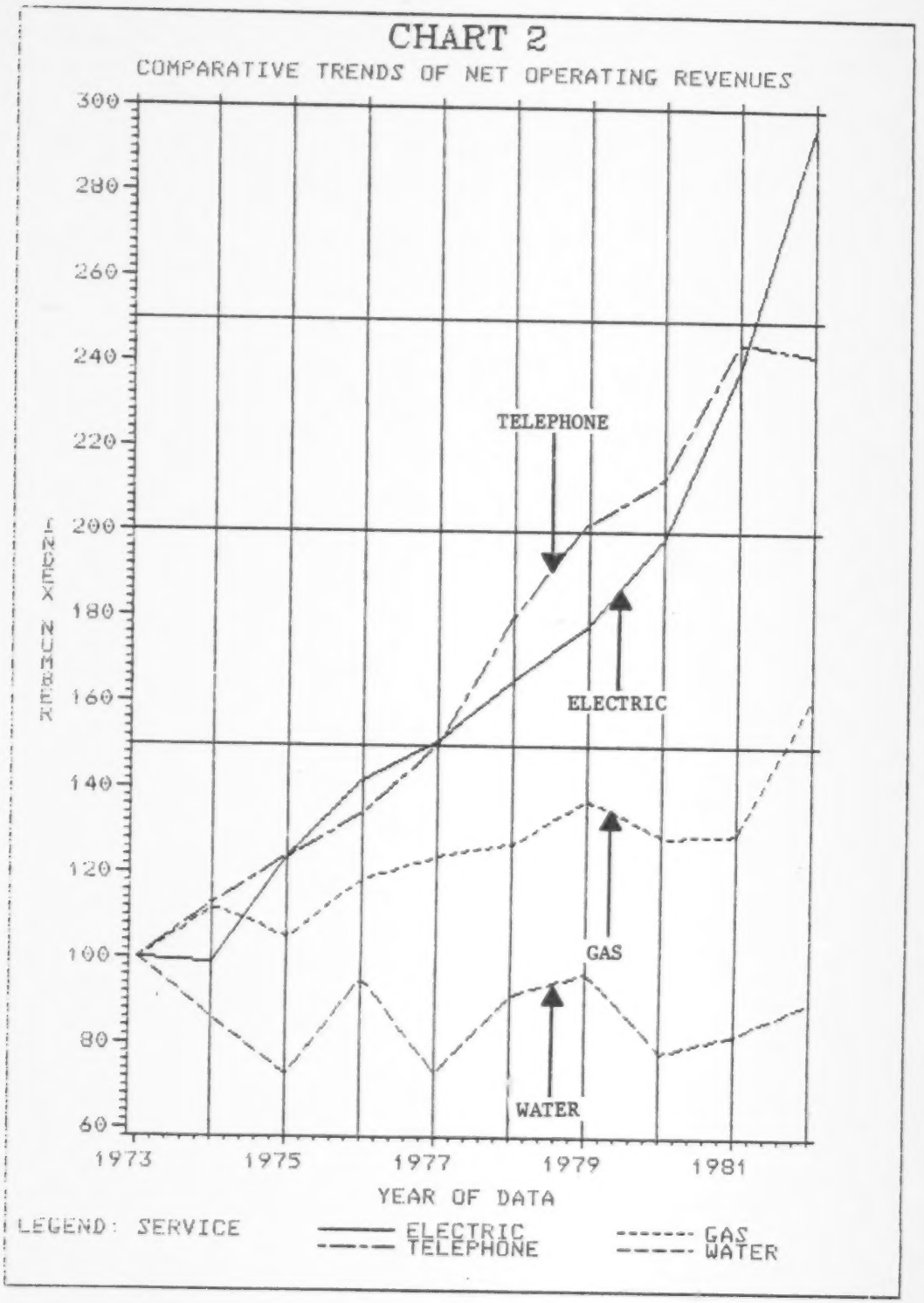


CHART 2
COMPARATIVE TRENDS OF NET OPERATING REVENUES
INDEX NUMBER
300
280
260
240
220
200
180
160
140
120
100
80
60
1973
1975
1977
1979
1981
YEAR OF DATA
TELEPHONE
ELECTRIC
GAS
WATER
LEGEND: SERVICE
ELECTRIC
TELEPHONE
GAS
WATER

The number of public utilities operating in the State as of December 31, 1982 is summarized below. These figures include all utilities regardless of size.

	Total	Private	Municipal
Electric	99	14	85
Gas	16	15	1
Telephone	116*	116*	0
Water	554	15	539
Heating	3	2	1
Total	788	162	626

* Includes 2 roadway companies and 14 radio-telephone service companies. Does not include two Illinois based utilities that serve a few customers in Wisconsin.

FINANCIAL STATISTICS

Statistics on plant investment, capitalization and disposition of income are presented in this section of the bulletin. These data necessarily include all operations of Wisconsin utilities, including out-of-state operations of those utilities operating in neighboring states.

A number of municipalities include nonutility sewer operations in their water utility reports. Figures on income and capitalization reflect these operations when reported. It is to be emphasized, however, that sewer coverage presented herein is by no means complete since many municipalities operate their non-utility sewer departments independently and do not report those operations.

Utility Plant in Service and Accumulated Provisions for Depreciation

Table 1 presents a summary of utility plant in service and accumulated provisions for depreciation of Wisconsin utilities during the period from 1980 through 1982. Charts 3, 4 and 5 show similar data in graphic form over the past 10 years.

About $10.3 billion are invested in utility plant by Wisconsin utilities. Of this amount, electric plant makes up 46.7% with telephone, water and gas plant amounting to 31.4%, 10.3% and 9.8% respectively. Sewer and heating plant make up another 1.8%.

Electric cooperatives and companies engaged in intrastate transmission of natural gas do not fall under the jurisdiction of the Wisconsin Public Service Commission and therefore, data covering these companies are not included in this study. Electric cooperatives did have gross plant investment in Wisconsin of about $635 million as of December 31, 1982. Gas pipeline companies had about $241.6 million in gross plant as of the same date.

Except for water and sewer service, public utility operations in Wisconsin are predominantly under private management. For example, municipalities own and operate 98% of the total water plant but only 4% of the electric plant, about 0.05% of the gas distribution plant and no telephone plant.

As of December 31, 1982, Wisconsin electric utilities had accumulated provisions for depreciation equal to 43% of electric plant in service. Telephone utilities had accumulated 27%, water utilities 20% and gas utilities 39%. The comparable figures in 1973 were 40%, 24%, 20% and 38% respectively.

Charts 3, 4 and 5 show that utility plant in service has increased steadily over the past 10 years. Electric utility plant has increased 103% since 1973. Telephone plant is up 108% while water and gas plant increased 72% and 49% for the period.

Capitalization

Capitalization of public utilities in Wisconsin is summarized in Table 2 and Charts 6 and 7. Total capitalization was about $7,334 million in 1982. Of that amount 82% was accounted for by private utilities with the remaining 18% being municipal investment.

Total capitalization was up 5% over 1981, and up 72% over the past 10 years. The corresponding figures are 5% and 70% for private utilities and 7% and 79% for municipals. Charts 6 and 7 give graphic representation of these figures.

CHART 3

UTILITY PLANT IN SERVICE
AND ACCUMULATED PROVISION FOR DEPRECIATION
ELECTRIC UTILITIES

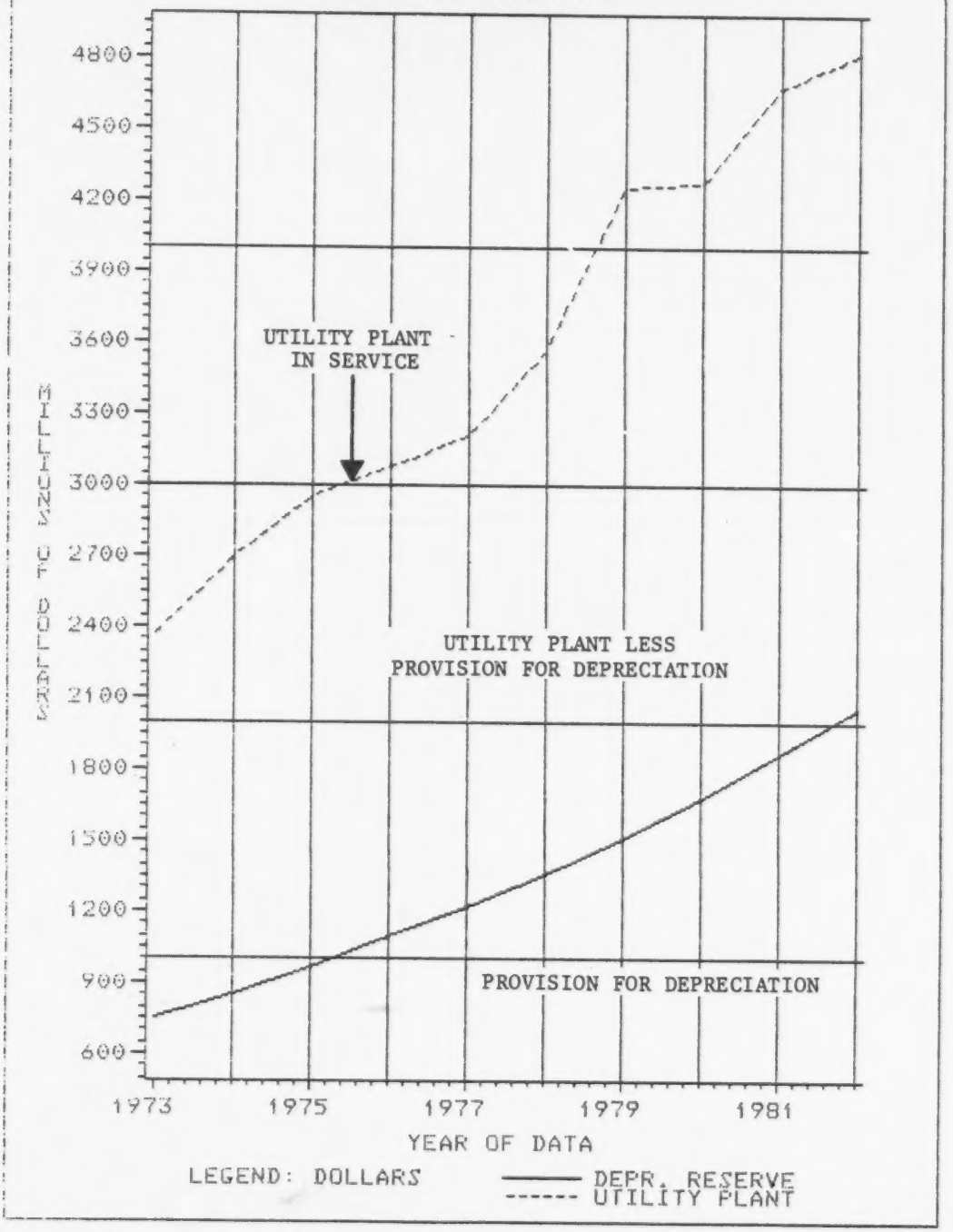
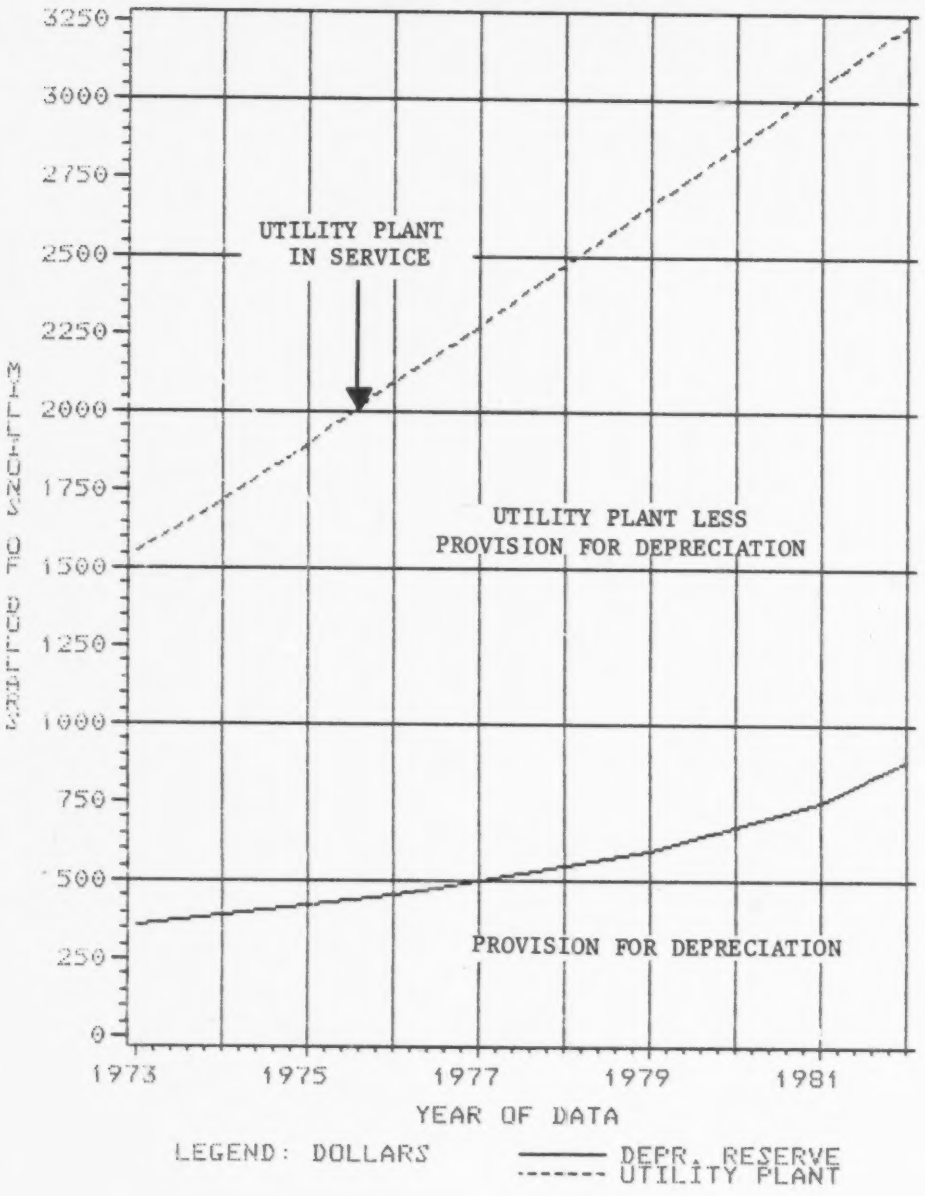


CHART 4

UTILITY PLANT IN SERVICE
AND ACCUMULATED PROVISION FOR DEPRECIATION
TELEPHONE UTILITIES



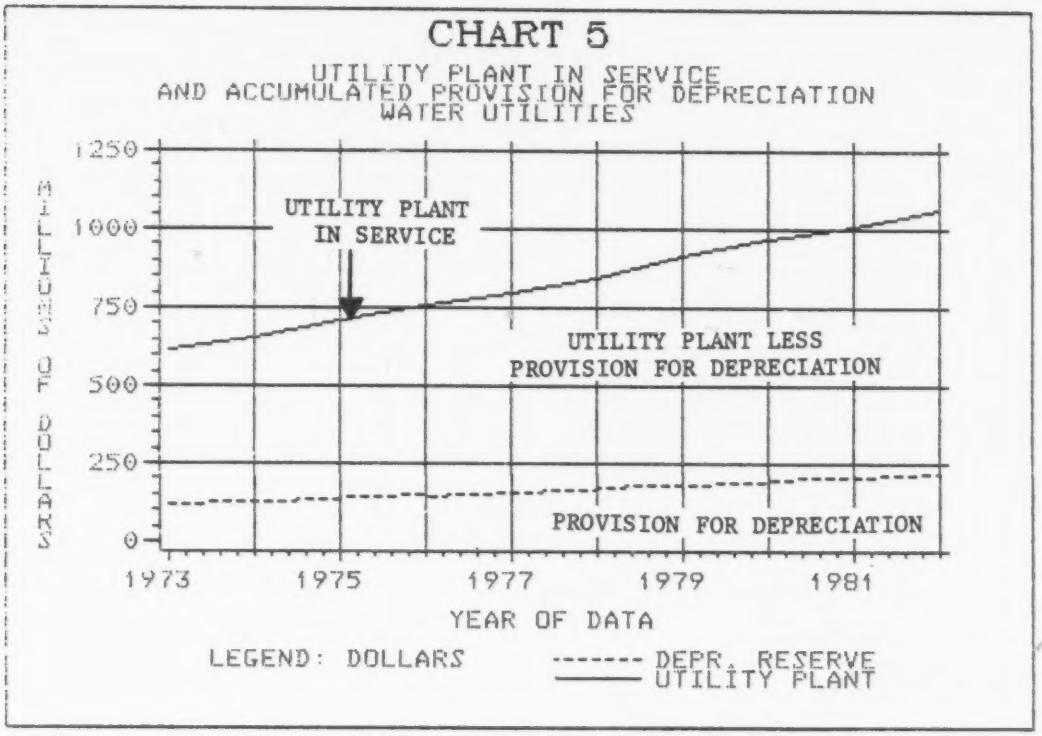


CHART 5
UTILITY PLANT IN SERVICE
AND ACCUMULATED PROVISION FOR DEPRECIATION
WATER UTILITIES
1250
1000
750
500
250
0
UTILITY PLANT
IN SERVICE
UTILITY PLANT LESS
PROVISION FOR DEPRECIATION
PROVISION FOR DEPRECIATION
1973
1975
1977
1979
1981
YEAR OF DATA
LEGEND: DOLLARS
DEPR. RESERVE
UTILITY PLANT

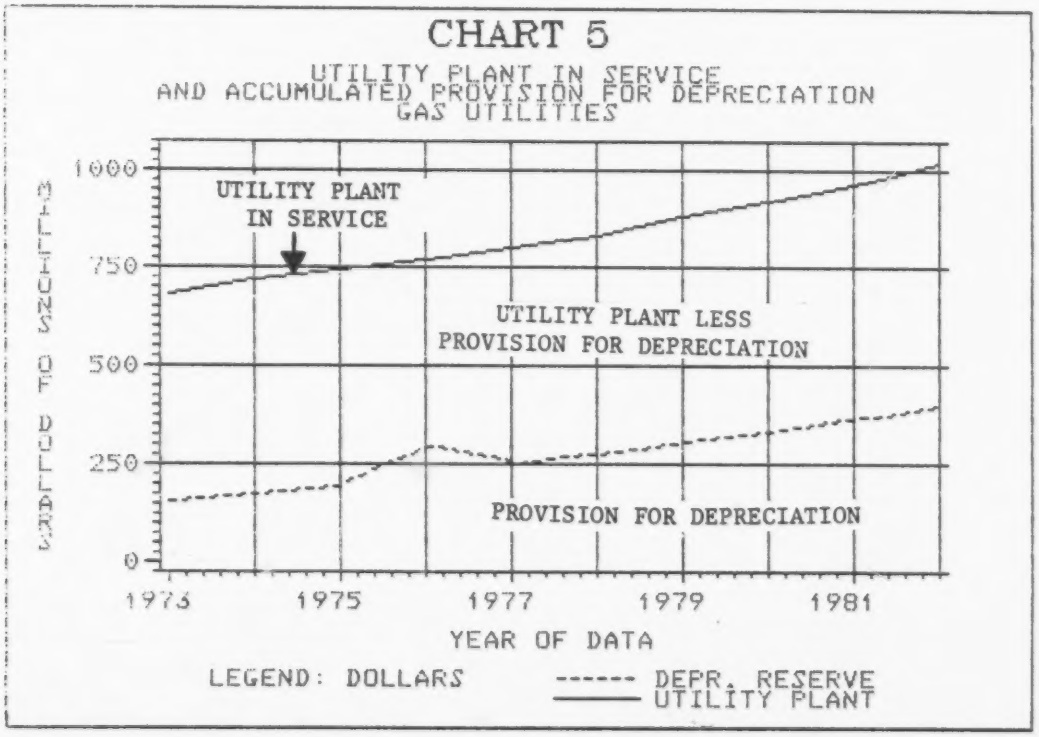


CHART 5
UTILITY PLANT IN SERVICE
AND ACCUMULATED PROVISION FOR DEPRECIATION
GAS UTILITIES
1000
750
500
250
0
UTILITY PLANT
IN SERVICE
UTILITY PLANT LESS
PROVISION FOR DEPRECIATION
PROVISION FOR DEPRECIATION
1973
1975
1977
1979
1981
YEAR OF DATA
LEGEND: DOLLARS
DEPR. RESERVE
UTILITY PLANT

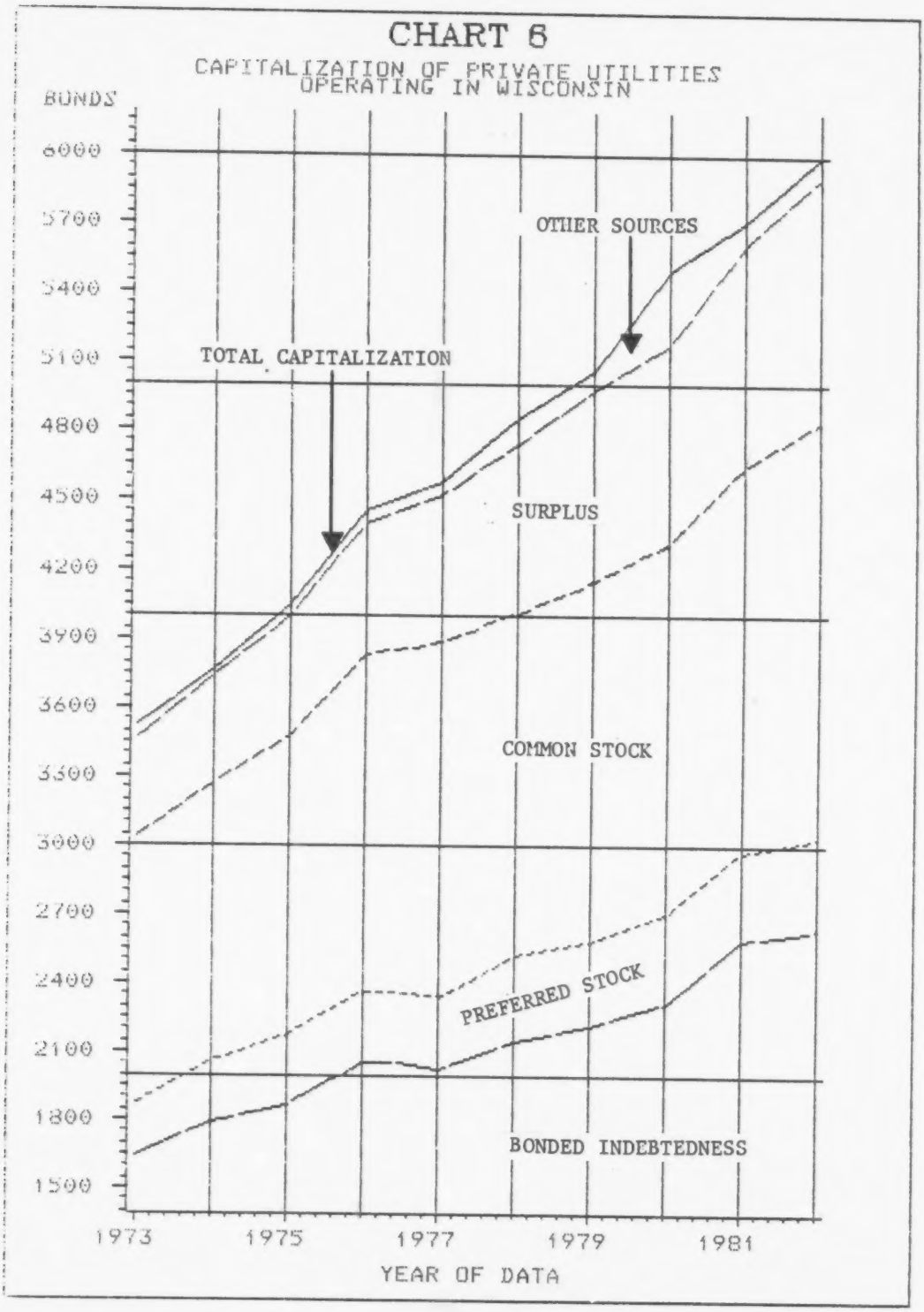


CHART 6
CAPITALIZATION OF PRIVATE UTILITIES
OPERATING IN WISCONSIN
BONDS
6000
5700
5400
5100
4800
4500
4200
3900
3600
3300
3000
2700
2400
2100
1800
1500
OTHER SOURCES
TOTAL CAPITALIZATION
SURPLUS
COMMON STOCK
PREFERRED STOCK
BONDED INDEBTEDNESS
1973
1975
1977
1979
1981
YEAR OF DATA

10.

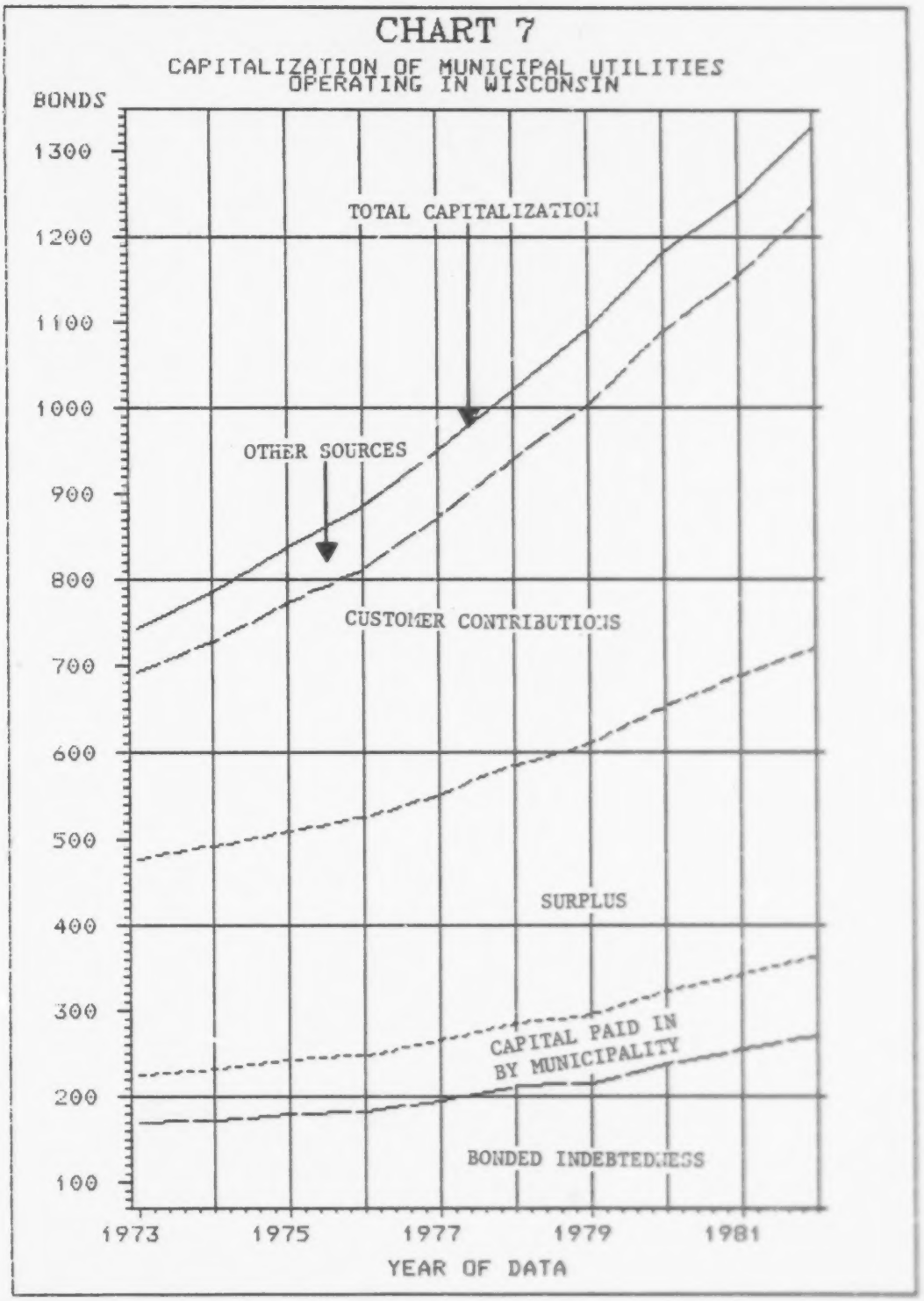


CHART 7
CAPITALIZATION OF MUNICIPAL UTILITIES
OPERATING IN WISCONSIN
BONDS
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
TOTAL CAPITALIZATION
OTHER SOURCES
CUSTOMER CONTRIBUTIONS
SURPLUS
CAPITAL PAID IN
BY MUNICIPALITY
BONDED INDEBTEDNESS
1973
1975
1977
1979
1981
YEAR OF DATA

Chart 6 further shows bonds and common stocks outstanding and related accounts to be the largest source of capital for private utilities. Common stock also contributes a substantial share of total capitalization.

As shown below, Contributions in Aid of Construction is the largest item of municipal utility Capitalization. Surplus and Bonded Debt are next in size. Capital Paid in by Municipalities was only about 7.1% of the total at the end of 1982.

A comparison of the capitalization of private and municipal utilities as of December 31, 1982 is presented below:

	Private Utilities	Municipal Utilities
Bonded Indebtedness	43.8%	20.3%
Common Stock or Capital Paid in by Municipality	29.9	7.1
Preferred Stock	6.7	0.0
Surplus	17.9	26.8
Advances from Affiliates or Municipalities	0.1	6.8
Contributions in Aid of Construction	1.4	38.8
Customer Advances in Aid of Construction	0.2	0.2
Total	100.0%	100.0%

Disposition of Income

The term "gross income" as used here, is a net figure representing total income available to meet interest payments, dividends and similar items. The disposition of gross income is summarized in Table 3 and Charts 8 and 9.

Total gross income of private utilities in Wisconsin totaled $669.1 million in 1982, 8.4% above the preceding year. Interest and related deductions absorbed $262.3 million, preferred stock dividends $33.2 million, dividends on common stock $246.6 million, and $127.1 million were carried to surplus.

Municipal utilities had $33.5 million in gross income in 1982, up 8.7% from the preceding year. Interest and related charges amounted to $20.3 million, $2,049 thousand were appropriated to municipalities, and $11.2 million were carried to surplus.

Payments during 1982 on each class of security or equity, expressed as a percent of average book values at the beginning and close of the year are compared below:

	Private Utilities	Municipal Utilities
Interest on Long-Term Debt Divided by Long-Term Debt	7.98%	5.63%
Perferred Stock Dividends Divided by Preferred Stocks	8.23	0.00
Common Stock Dividends Divided by Common Stock	13.71	0.00
Appropriations to City Divided by Capital Paid in by Municipality	0.0	2.18
Common Stock Dividends Divided by Common Stock Plus Surplus	8.59	0.00
Appropriations to City Divided by Capital Paid in by Municipality Plus Surplus	0.00	0.45

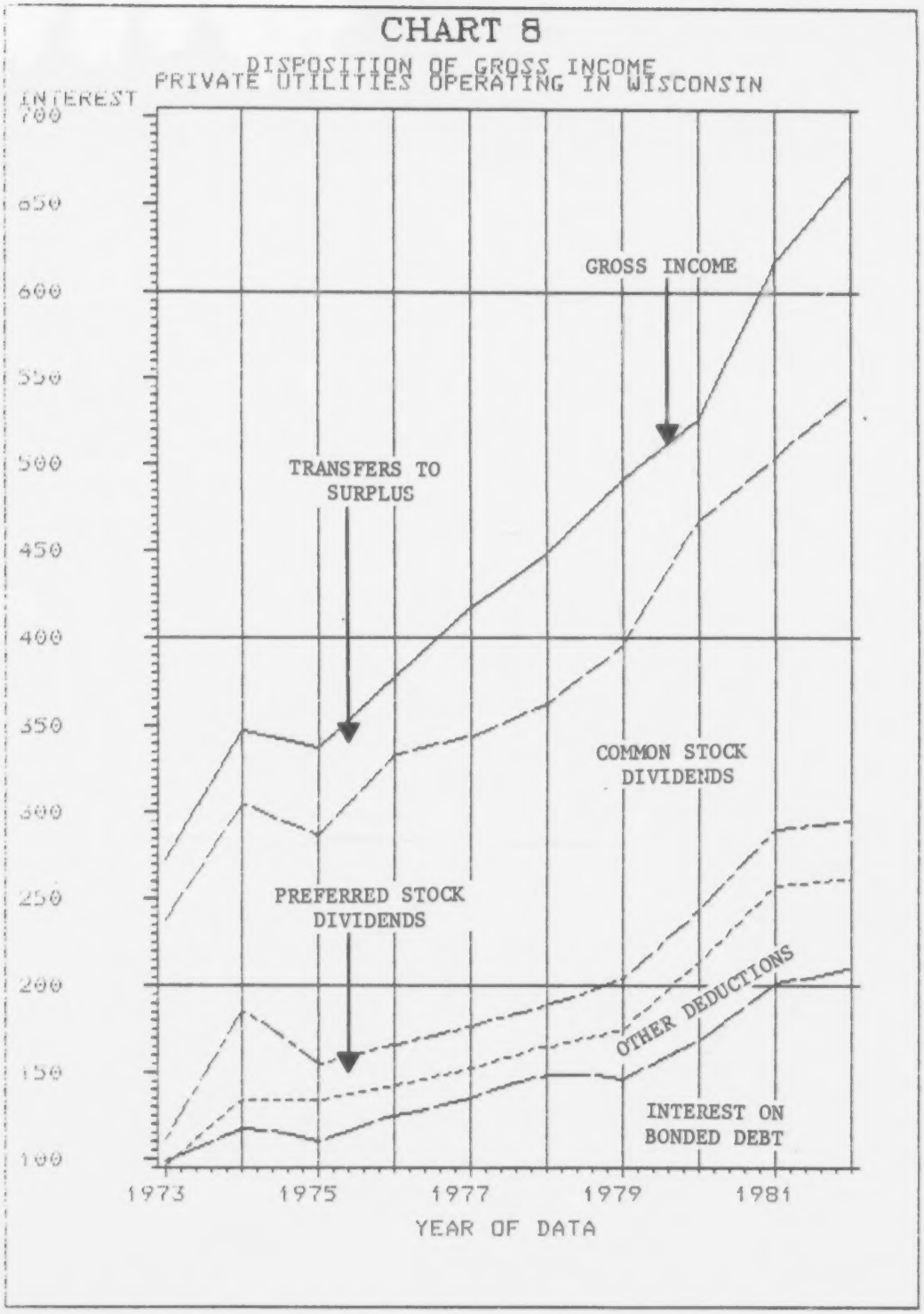


CHART 8
DISPOSITION OF GROSS INCOME
PRIVATE UTILITIES OPERATING IN WISCONSIN
INTEREST
700
650
600
550
500
450
400
350
300
250
200
150
100
GROSS INCOME
TRANSFERS TO SURPLUS
COMMON STOCK DIVIDENDS
PREFERRED STOCK DIVIDENDS
OTHER DEDUCTIONS
INTEREST ON BONDED DEBT
1973
1975
1977
1979
1981
YEAR OF DATA

CHART 9

DISPOSITION OF GROSS INCOME
MUNICIPAL UTILITIES OPERATING IN WISCONSIN

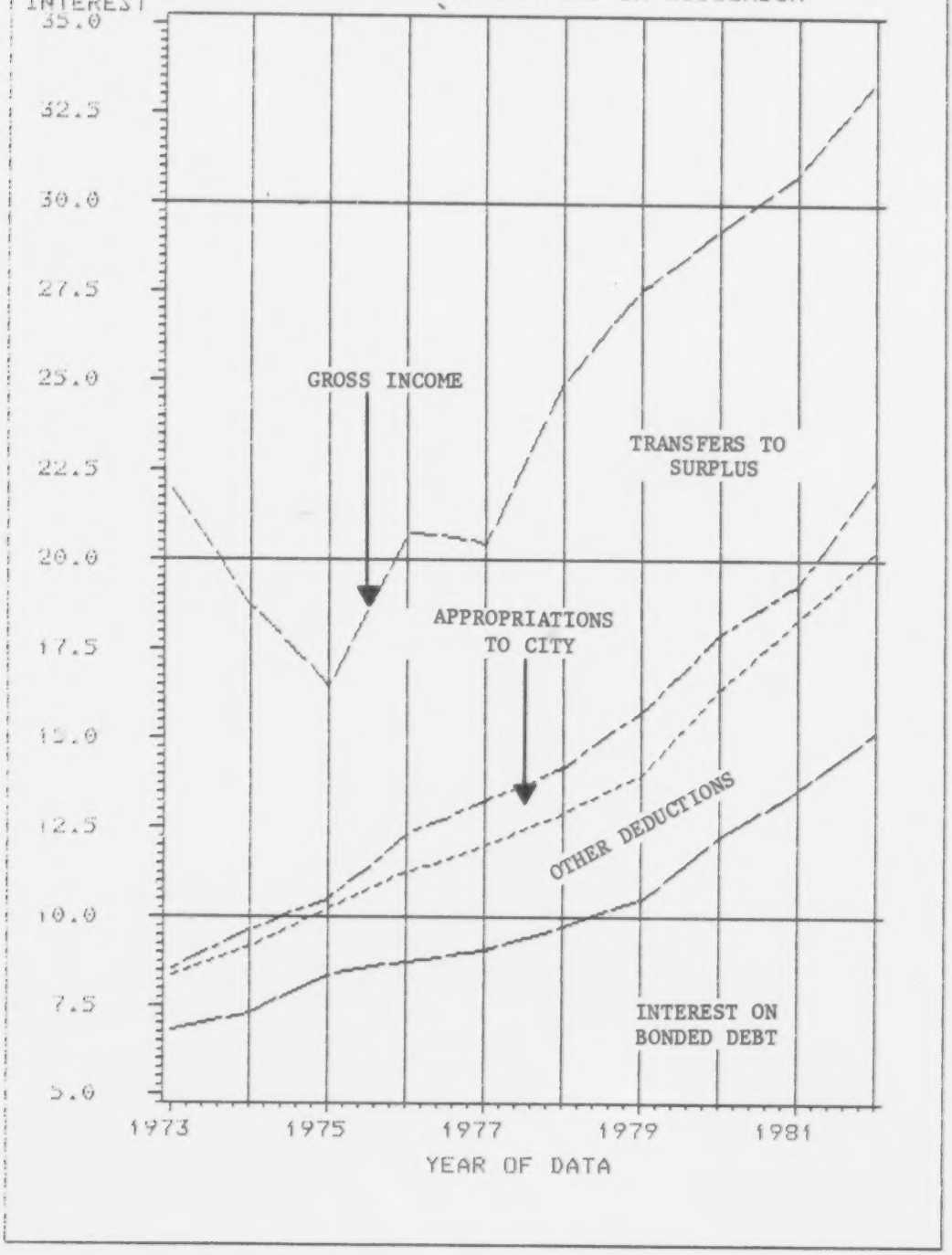


TABLE 1

SUMMARY OF UTILITY PLANT IN SERVICE AND
ACCUMULATED PROVISION FOR DEPRECIATION
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1982-1980

	Dec. 31, 1982	Dec. 31, 1981	Dec. 31, 1980
All Utilities			
Utility Plant in Service 2/ 3/			
Electric	$ 4,824,927,236	$4,681,252,066	$ 4,275,211,337
Gas	1,016,150,114	965,172,327	918,789,377
Water	1,062,444,803	1,005,689,786	965,635,015
Sewer	163,342,993	133,700,837	112,634,298
Telephone	3,242,796,323	3,051,559,733	2,851,685,835
Heating	19,670,797	18,894,027	18,524,317
Total	$10,329,332,266	$9,856,268,776	$ 9,142,480,179
Accumulated Provision for Depreciation 2/ 3/			
Electric	$ 2,054,489,849	$1,865,440,601	$ 1,678,559,922
Gas	400,719,443	364,194,733	330,834,663
Water	218,550,587	203,784,705	192,100,006
Sewer	20,855,364	19,469,735	18,416,932
Telephone	881,575,212	748,043,825	668,893,772
Heating	8,751,007	8,866,754	8,357,198
Total	$ 3,584,941,462	$3,209,800,353	$ 2,897,162,493
Utility Plant Less Provision For Depreciation 2/ 3/			
Electric	$ 2,770,437,387	$2,815,811,465	$ 2,596,651,415
Gas	615,430,671	600,977,594	587,954,714
Water	843,894,216	801,905,081	773,535,009
Sewer	142,487,629	114,231,102	94,217,366
Telephone	2,361,221,111	2,303,515,908	2,182,792,063
Heating	10,919,790	10,027,273	10,167,119
Total	$ 6,744,390,804	$6,646,468,423	$ 6,245,317,686
Private Utilities			
Utility Plant in Service 2/ 3/			
Electric	$ 4,614,306,639	$4,477,934,938	$ 4,083,405,456
Gas	1,015,591,166	964,636,375	918,305,483
Water	20,058,138	18,893,425	18,383,407
Sewer	145,897	145,897	145,897
Telephone	3,242,796,323	3,051,559,733	2,851,685,835
Heating	19,579,089	18,802,595	18,433,190
Total	$ 8,912,477,252	$8,531,972,963	$ 7,890,359,268

TABLE 1 (Concluded)

SUMMARY OF UTILITY PLANT IN SERVICE AND
ACCUMULATED PROVISION FOR DEPRECIATION
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1982-1980

	Dec. 31, 1982	Dec. 31, 1981	Dec. 31, 1980
Private Utilities (Cont.)			
Accumulated Provision for Depreciation 2/ 3/			
Electric	$ 1,961,053,521	$1,778,017,498	$1,595,667,295
Gas	400,535,001	364,026,213	330,681,857
Water	5,150,296	4,771,911	4,482,381
Sewer	56,774	54,130	51,486
Telephone	881,575,212	748,043,825	668,893,772
Heating	8,693,962	8,810,886	8,302,898
Total	$ 3,257,064,766	$2,903,724,463	$2,608,079,689
Utility Plant Less Provision For Depreciation 2/ 3/			
Electric	$ 2,653,253,118	$2,699,917,440	$2,487,738,161
Gas	615,056,165	600,610,162	587,623,626
Water	14,907,842	14,121,514	13,901,026
Sewer	89,123	91,767	94,411
Telephone	2,361,221,111	2,303,515,908	2,182,792,063
Heating	10,885,127	9,991,709	10,130,292
Total	$ 5,655,412,486	$5,628,248,500	$5,282,279,579
Municipal Utilities			
Utility Plant in Service 2/			
Electric	$ 210,620,597	$ 203,317,128	$ 191,805,881
Gas	558,948	535,952	483,894
Water	1,042,386,665	986,796,361	947,251,608
Sewer	163,197,096	133,554,940	112,488,401
Heating	91,708	91,432	91,127
Total	$ 1,416,855,014	$1,324,295,813	$1,252,120,911
Accumulated Provision for Depreciation 2/			
Electric	$ 93,436,328	$ 87,423,103	$ 82,892,627
Gas	184,442	168,520	152,806
Water	213,400,291	199,012,794	187,617,625
Sewer	20,798,590	19,415,605	18,365,446
Heating	57,045	55,868	54,300
Total	$ 327,876,696	$ 306,075,890	$ 289,082,804
Utility Plant Less Provision for Depreciation 2/			
Electric	$ 117,184,269	$ 115,894,025	$ 108,913,254
Gas	374,506	367,432	331,088
Water	828,986,374	787,783,567	759,633,983
Sewer	142,398,506	114,139,335	94,122,955
Heating	34,663	35,564	36,827
Total	$ 1,088,978,318	$1,018,219,923	$ 963,038,107

1/ Total plant includes out-of-state properties.
2/ Including apportionment of common property.
3/ Excluding utility plant leased to others.

TABLE 2

COMPARATIVE STATEMENT OF CAPITALIZATION
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1982-1980

	Dec. 31, 1982	Dec. 31, 1981	Dec. 31, 1980
All Utilities			
Long-Term Debt Outstanding	$2,903,515,693	$2,844,807,733	$2,546,852,026
Advances from Affiliates or Municipality	90,601,464	105,706,786	331,189,592
Preferred Stock Outstanding	402,987,200	382,929,135	388,624,360
Common Stock Outstanding and Related Accounts	1,798,292,978	1,668,479,003	1,614,303,437
Capital Paid in by Municipality	94,073,579	87,314,355	84,714,416
Surplus	1,430,068,226	1,309,320,249	1,192,333,781
Customers' Advances in Aid of Construction	13,715,838	13,126,624	15,601,312
Contributions in Aid of Construction	600,389,532	544,287,786	504,919,667
Total	$7,333,644,510	$6,955,971,671	$6,678,538,591
Private Utilities			
Long-Term Debt Outstanding	$2,633,756,162	$2,590,371,947	$2,309,087,418
Advances from Affiliates	303,452	18,006,151	241,650,818
Preferred Stock Outstanding	402,987,200	382,929,135	388,624,360
Common Stock Outstanding and Related Accounts	1,798,292,978	1,668,479,003	1,614,303,437
Surplus	1,073,059,117	963,557,814	863,319,534
Customers' Advances in Aid of Construction	11,405,116	10,623,878	12,062,599
Contributions in Aid of Construction	83,256,491	76,242,075	66,157,324
Total	$6,003,060,516	$5,710,210,003	$5,495,205,490
Municipal Utilities			
Long-Term Debt Outstanding	$ 269,759,531	$ 254,435,786	$ 237,764,608
Advances from Municipality	90,298,012	87,700,635	89,538,774
Capital Paid in by Municipality	94,073,579	87,314,355	84,714,416
Surplus	357,009,109	345,762,435	329,014,247
Customers' Advances in Aid of Construction	2,310,722	2,502,746	3,538,713
Contributions in Aid of Construction	517,133,041	468,045,711	438,762,343
Total	$1,330,583,994	$1,245,761,668	$1,183,333,101

1/ These data necessarily represent total company figures. A few companies operate outside of Wisconsin. Electric, gas, water, sewer, heating and telephone utilities are included.

TABLE 3

DISPOSITION OF INCOME
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1982-1980

	1982	1981	1980
All Utilities			
Net Operating Revenues			
Electric	$ 360,720,236	$ 320,819,598	$ 267,262,876
Gas	63,691,068	51,298,396	53,483,512
Telephone	207,383,151	209,798,721	182,229,838
Water	12,708,093	11,622,470	11,058,962
Sewer	485,625	(308,586)	(204,095)
Steam and Hot Water Heating	1,569,684	1,248,324	969,985
Total	$ 646,557,857	$ 594,478,923	$ 514,801,078
Income from Plant Leased to Others	$ 60,802	$ 95,231	$ 45,814
Income from Merchandising and Jobbing	77,334	291,388	337,146
Other Income - Net	55,910,560	53,026,713	39,842,030
Gross Income	$ 702,606,553	$ 647,892,255	$ 555,026,068
Interest on Long-Term Debt	$ 225,421,450	$ 214,924,999	$ 181,417,582
Amortization of Debt Discount and Premium	2,226,423	2,044,285	1,606,804
Interest on Debt to Associated Companies or City	12,919,251	12,206,227	7,610,715
Other Deductions	41,977,746	47,043,320	40,092,468
Net Income	$ 420,061,683	$ 371,673,424	$ 324,298,499
Dividend Appropriations on Preferred Stock	$ 33,168,926	$ 32,593,024	$ 29,601,837
Dividend Appropriations on Common Stock 2/	246,598,109	213,769,893	224,070,921
Appropriations to City	2,049,138	923,597	1,508,894
Balance Transferred to Surplus	$ 138,245,510	$ 124,386,910	$ 69,116,847

(Continued)

TABLE 3 (Continued)

DISPOSITION OF INCOME
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1982-1980

	1982	1981	1980
Private Utilities			
Net Operating Revenues			
Electric	$ 356,152,190	$ 317,383,163	$ 261,798,075
Gas	63,630,693	51,296,816	53,471,706
Telephone	207,383,151	209,798,721	182,229,838
Water	905,518	871,482	666,752
Sewer	134	(8,952)	(1,064)
Steam and Hot Water Heating	1,583,111	1,266,141	977,083
Total	$ 629,654,797	$ 580,607,371	$ 499,142,390
Income from Plant Leased to Others	$ 59,902	$ 94,331	$ 44,914
Income from Merchandising and Jobbing	(44,328)	156,753	164,614
Other Income - Net	39,465,842	36,246,526	26,365,103
Gross Income	$ 669,136,213	$ 617,104,981	$ 525,717,021
Interest on Long-Term Debt	$ 210,246,256	$ 201,378,889	$ 169,157,829
Amortization of Debt Discount and Premium	1,817,531	1,691,614	1,332,967
Interest on Debt to Associated Companies	8,280,340	7,992,213	3,711,901
Other Deductions	41,942,490	46,768,921	40,121,901
Net Income	$ 406,849,596	$ 359,273,344	$ 311,392,423
Dividend Appropriations on Preferred Stock	$ 33,168,926	$ 32,593,024	$ 29,601,837
Dividend Appropriations on Common Stock 2/	246,598,109	213,769,893	224,070,921
Balance Transferred to Surplus	$ 127,082,561	$ 112,910,427	$ 57,719,665

TABLE 3 (Concluded)

DISPOSITION OF INCOME
PUBLIC UTILITIES OPERATING IN WISCONSIN 1/
1982-1980

	1982	1981	1980
Municipal Utilities			
Net Operating Revenues			
Electric	$ 4,568,046	$ 3,436,435	$ 5,464,801
Gas	60,375	1,580	11,806
Water	11,802,575	10,750,988	10,392,210
Sewer	485,491	(299,634)	(203,031)
Steam and Hot Water Heating	(13,427)	(17,817)	(7,098)
Total	$ 16,903,060	$ 13,871,552	$ 15,658,688
Income from Plant Leased to Other	$ 900	$ 900	$ 900
Income from Merchandising and Jobbing	121,662	134,635	172,532
Other Income - Net	16,444,718	16,780,187	13,476,927
Gross Income	$ 33,470,340	$ 30,787,274	$ 29,309,047
Interest on Long-Term Debt	$ 15,175,194	$ 13,546,110	$ 12,259,753
Amortization of Debt Discount and Premium	408,892	352,671	273,837
Interest on Debt to City	4,638,911	4,214,014	3,898,814
Other Deductions	35,256	274,399	(29,433)
Net Income	$ 13,212,087	$ 12,400,080	$ 12,906,076
Appropriations to City	2,049,138	923,597	1,508,894
Balance Transferred to Surplus	$ 11,162,949	$ 11,476,483	$ 11,397,182

1/ Includes out-of-state operations of Wisconsin utilities.
2/ Excluding Stock Dividends.

ELECTRIC UTILITY STATISTICS

Comparative statistics of Wisconsin electric utilities for the 3-year period, 1980 to 1982, are summarized in this section. Out-of-state operations are excluded (except in tables 7, 8 and 9 where data on out-of-state sales, purchases and generating plant are presented).

The following tables and charts present the data covering electric utility operations:

Table 4 - Comparative Statement of Revenues and Expenses, 1982-1980
Table 5 - Sales to Ultimate Customers, 1982-1980
Table 6 - Comparative Statement of Operating Expenses, 1982-1980
Table 7 - Summary of Megawatt Hours Sold and Used, 1982-1980
Table 8 - Megawatt Hours Generated and Purchased, 1982-1980
Table 9 - Generating Plant, Substation and Transmission Line Data, 1982-1980
Table 10 - Condensed Summary of 1982 Operations - Individual Private Electric Utilities
Table 11 - Condensed Summary of 1982 Operations - Individual Municipal Electric Utilities
Chart 10 - Residential Revenue and Consumption Ratios, Wisconsin and United States, 1973-1982
Chart 11 - Comparison of Revenues and Expenses, Wisconsin Electric Utilities, 1973-1982
Chart 12 - Revenues from Sales to Ultimate Consumers by Individual Wisconsin Electric Utilities, Percent of Total, 1982

Electric Consumers

The total number of ultimate (retail) electric consumers increased 1.0% over 1981. Residential customers increased 1.5% and rural customers decreased 0.2%. Commercial and industrial customers increased 3.1%.

As has already been pointed out, electric cooperatives are not included in the tables. These organizations served an estimated 162,000 customers during 1982. This was 53% of all rural electric customers served in the state.

Revenue and Consumption Ratios

Kilowatt hours sold to ultimate consumers in Wisconsin decreased 0.6% during 1982. Commercial and industrial consumption decreased 2.0% during the year while residential and rural consumption increased 2.0% and 2.1% respectively.

State-wide averages by class of service for revenue per megawatt hour are compared below:

	1982	1981	1980
Residential	$62.88	$54.81	$48.01
Commercial and Industrial	50.50	44.05	39.12
Rural	61.79	54.79	47.96
Public St. and Hwy. Lighting	70.61	61.44	53.22
Other Sales to Public Auth.	47.46	40.70	36.65
Interdepartmental Sales	47.59	42.79	37.39
Total Ultimate Consumers	$54.96	$47.89	$42.35

State-wide average ratios of kilowatt hour consumption per customer and revenue per customer are compared below for the three major classes of service:

	1982	1981	1980
Average Annual Use (kWh)			
Residential	6,903	6,873	7,014
Commercial and Industrial	116,587	122,567	122,696
Rural	13,850	13,543	13,814
Average Annual Bill			
Residential	$ 434.02	$ 376.73	$ 336.75
Commercial and Industrial	5,887.52	5,399.35	4,800.35
Rural	855.81	742.10	662.56

Average annual use for residential customers increased by 0.4%, commercial and industrial decreased by 4.9% and rural increased by 2.3%. Average annual bills were up by 15.2%, 9.0% and 15.3% respectively for the three classes of service.

Residential revenue and consumption ratios of Wisconsin utilities are compared with national averages over a 10-year period in Chart 10. In 1982, the average Wisconsin residential customer consumed 20.6% fewer kilowatt hours and paid an average bill that was 22.6% less than the national average.

Electric Utility Income Account

A summary of the income account of Wisconsin electric utilities for the past three years is presented in Table 4. A 10-year graphic comparison is made in Chart 11.

Operating revenues continue to rise steadily with 1982 revenues up 13.7% over 1981. Total operating expenses increased 11.7% and net operating revenues were up 24.4%.

Table 6 presents a detailed analysis of operating expenses, exclusive of depreciation and taxes. Of the classes of expense shown, customer service had the greatest increase which was 37.5%. Sales was least with a 61.7% decrease.

A comparison of certain expense ratios of private and municipal utilities in 1982 is presented below:

	1982 Expense Ratios					
	Per Dollar of Revenue		Per Average Customer		Per MWh Sold	
	Pvt.	Mun.	Pvt.	Mun.	Pvt.	Mun
Production and Trans.	44.99¢	81.42¢	$542.89	$759.34	$28.31	$39.11
Distribution	4.74	3.51	57.20	32.72	2.98	1.68
Customer Accounts	2.05	1.62	24.83	15.10	1.29	0.78
Customer Services	0.66	0.00	8.00	0.00	0.42	0.00
Sales Promotion 1/	0.02	0.01	0.10	0.10	0.01	0.01
Administrative and General	6.23	4.29	75.12	39.99	3.92	2.06
Total Oper. and Main.	58.69	90.85	708.14	847.25	36.93	43.64
Depreciation	9.14	4.04	110.28	37.71	5.75	1.94
Taxes Other than Income Taxes	3.92	2.50	47.30	23.35	2.47	1.20
Income Taxes	9.17	0.00	110.69	0.00	5.77	0.00
Total Operating Exp.	80.92¢	97.39¢	$976.41	$908.31	$50.92	$46.78

1/ Includes customer service expenses for municipally owned utilities.

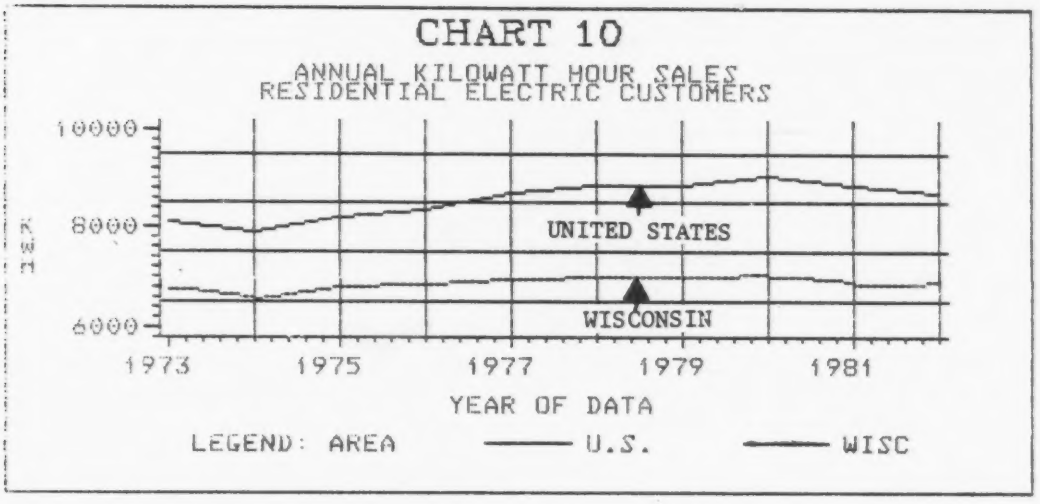
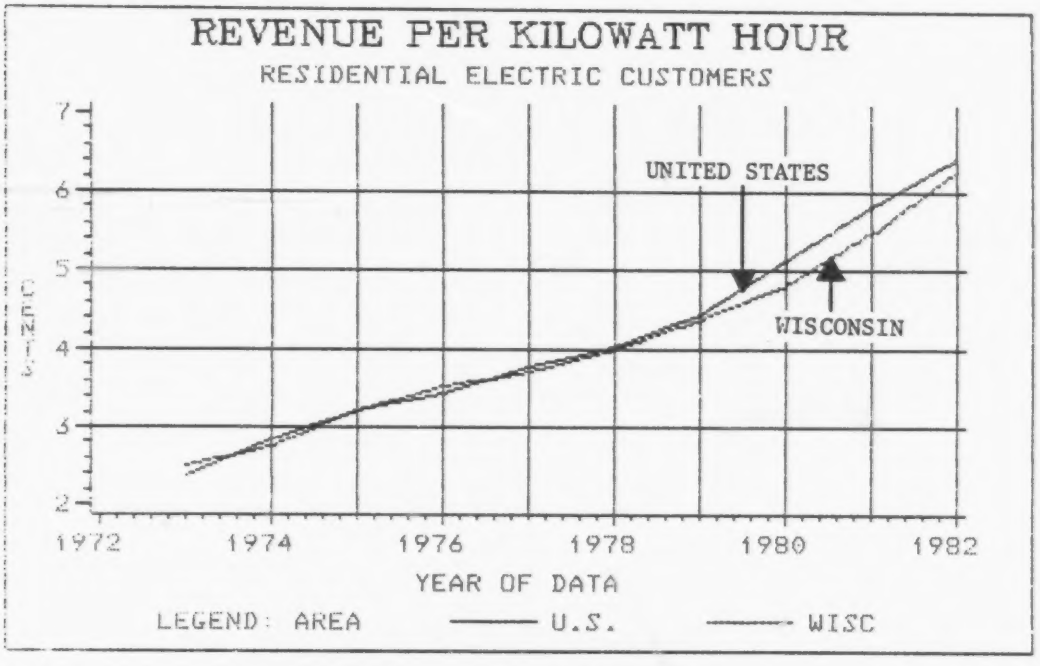
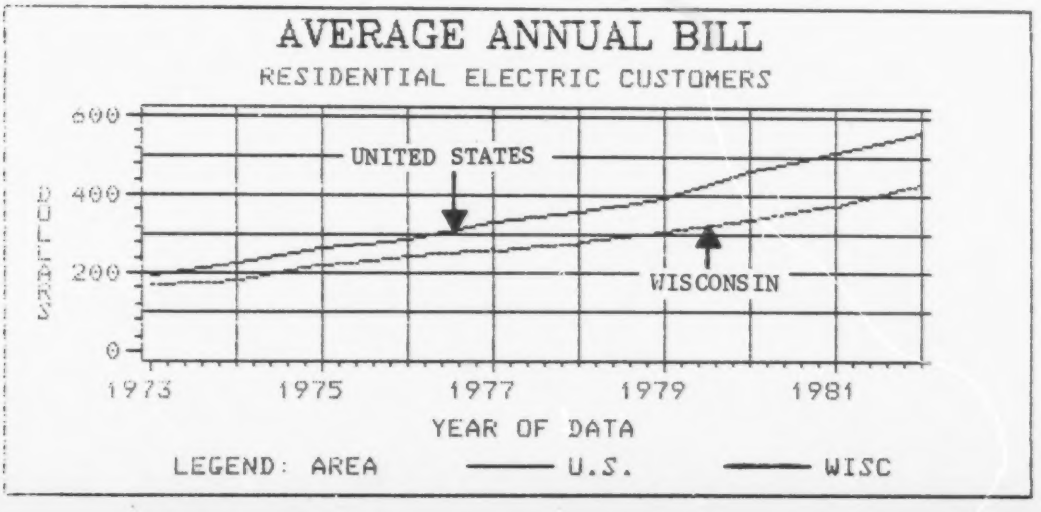


CHART 10
ANNUAL KILOWATT HOUR SALES
RESIDENTIAL ELECTRIC CUSTOMERS
10000
8000
6000
KWH
UNITED STATES
WISCONSIN
1973
1975
1977
1979
1981
YEAR OF DATA
LEGEND: AREA
U.S.
WISC


REVENUE PER KILOWATT HOUR
RESIDENTIAL ELECTRIC CUSTOMERS
7
6
5
4
3
2
CENTS
UNITED STATES
WISCONSIN
1972
1974
1976
1978
1980
1982
YEAR OF DATA
LEGEND: AREA
U.S.
WISC


AVERAGE ANNUAL BILL
RESIDENTIAL ELECTRIC CUSTOMERS
600
400
200
0
DOLLARS
UNITED STATES
WISCONSIN
1973
1975
1977
1979
1981
YEAR OF DATA
LEGEND: AREA
U.S.
WISC

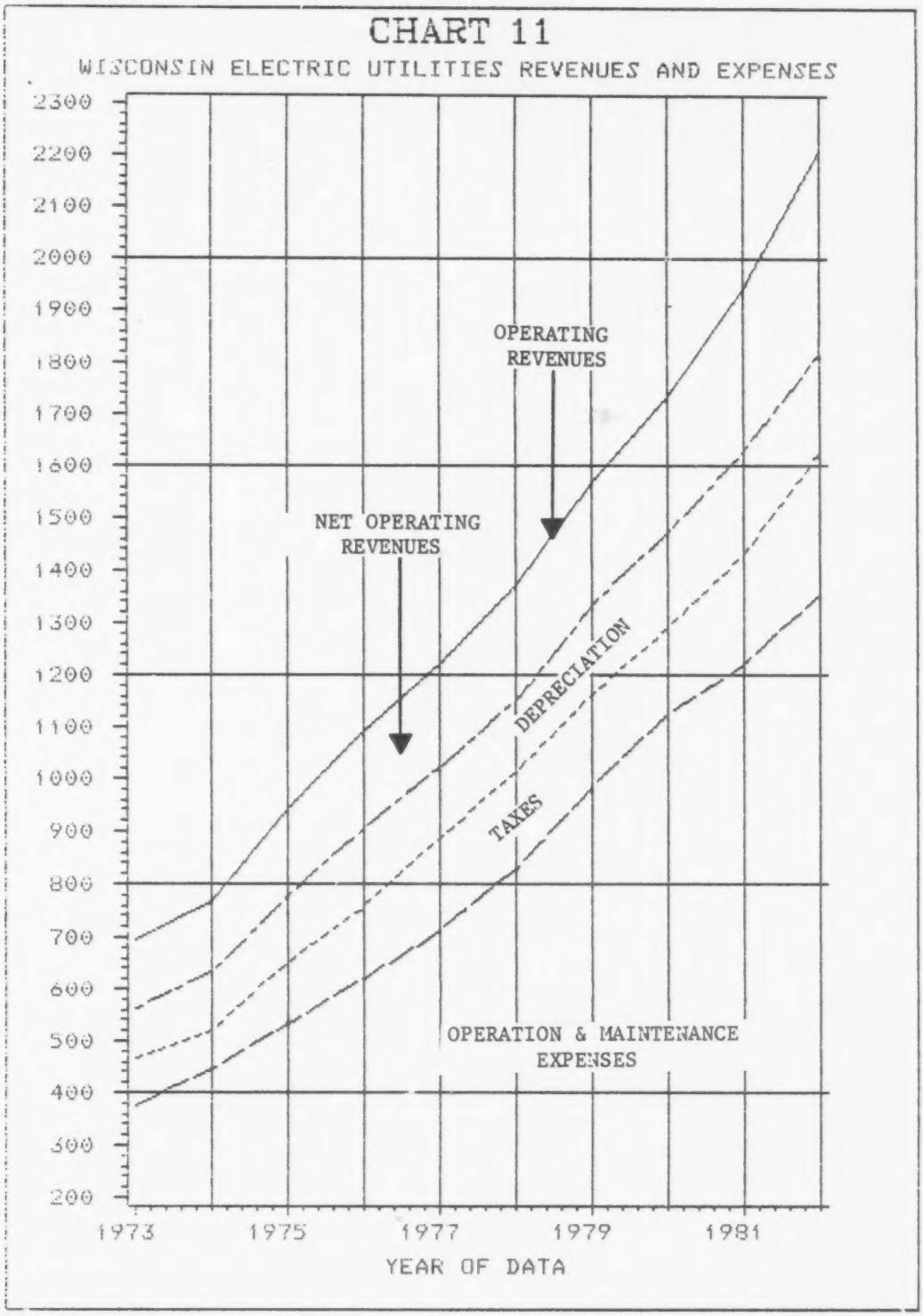


CHART 11
WISCONSIN ELECTRIC UTILITIES REVENUES AND EXPENSES
2300
2200
2100
2000
1900
1800
1700
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
OPERATING REVENUES
NET OPERATING REVENUES
DEPRECIATION
TAXES
OPERATION & MAINTENANCE EXPENSES
1973
1975
1977
1979
1981
YEAR OF DATA

In addition to the above breakdown of operating expenses, Table 6 presents the detail of production expense on a company-wide basis. If this breakdown is related to corresponding data on generation and purchases, the following comparison of costs per megawatt hour, exclusive of fixed charges, results:

	Production Expense* Per Megawatt Hour Generated or Purchased 1982	
	Private Utilities	Municipal Utilities
Steam Plants-Nuclear Fuel	$ 14.44	$ 0.00
Steam Plants-Fossil Fuel	25.97	61.86
Hydro Electric Plants	5.82	4.08
Internal Combustion (Recip. & Turbine)	156.65	177.62
Purchased Energy	27.91	36.65

*Excludes depreciation, taxes, and return.

Kilowatt Hours Generated and Purchased; Fuel Consumed

The sources of energy of Wisconsin electric utilities are summarized in Table 8. The net generation by plants located in Wisconsin is compared below on a percentage basis over a period of ten years:

	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973
Steam-Nuclear	30.3%	30.1%	28.4%	29.7%	34.3%	33.3%	33.0%	33.4%	27.5%	20.1%
Steam-Fossil	63.9	64.5	65.9	62.9	58.1	60.8	60.9	59.5	63.8	70.5
Hydro	5.6	4.8	4.6	5.0	5.1	4.2	3.6	4.8	5.0	6.2
Int. Comb.-Recip.	1/	1/	0.1	0.1	0.2	0.1	0.6	0.2	0.2	0.2
Int. Comb.-Turbine	0.2	0.6	1.0	2.3	2.3	1.5	1.9	2.1	3.5	3.0
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

During the ten years covered, fossil steam generating plants have produced a major portion of the State's electric energy, varying from a high of 70.5% in 1973 to a low of 58.1% in 1978. Privately owned utilities generated 99.0% of total energy produced by utilities in 1982. The most significant change has been the nuclear plants which generated no energy in 1970 but now produce about 30% of the total.

Fuel consumption ratios over the past five years are presented below:

	1982	1981	1980	1979	1978
BTU's of Fuel Used in Nuclear Steam Plants Per kWh Generated (Net)	10,830	10,844	10,825	10,605	10,491
BTU's of Fuel Used in Fossil Steam Plants Per kWh Generated (Net)	11,805	11,070	11,133	11,157	10,931
BTU's of Fuel Used in Turbine Plants Per kWh Generated (Net)	15,264	16,313	15,328	14,493	14,538
BTU's of Fuel Used in Reciprocating Plants Per kWh Generated (Net)	10,470	12,151	12,155	10,727	9,449

1/ Less than 0.05%.

Generating Plant and Transmission Line Data

Data on the capacity of generating plants and miles of transmission pole line are presented in Table 9. The total capacity of all generating plants operated by Wisconsin utilities as of December 1982 was about 10,000 megawatts of which about 102 megawatts were in plants located outside the State. Of the capacity of plants located in Wisconsin, 15.6% is steam-nuclear, 66.7% is steam-fossil, 3.5% is hydro, 1.1% is by reciprocating engines, and 13.1% is turbine.

About 9,346 miles of transmission line were in service at the close of 1982 of which about 4,400 miles carry voltage in excess of 100,000 volts.

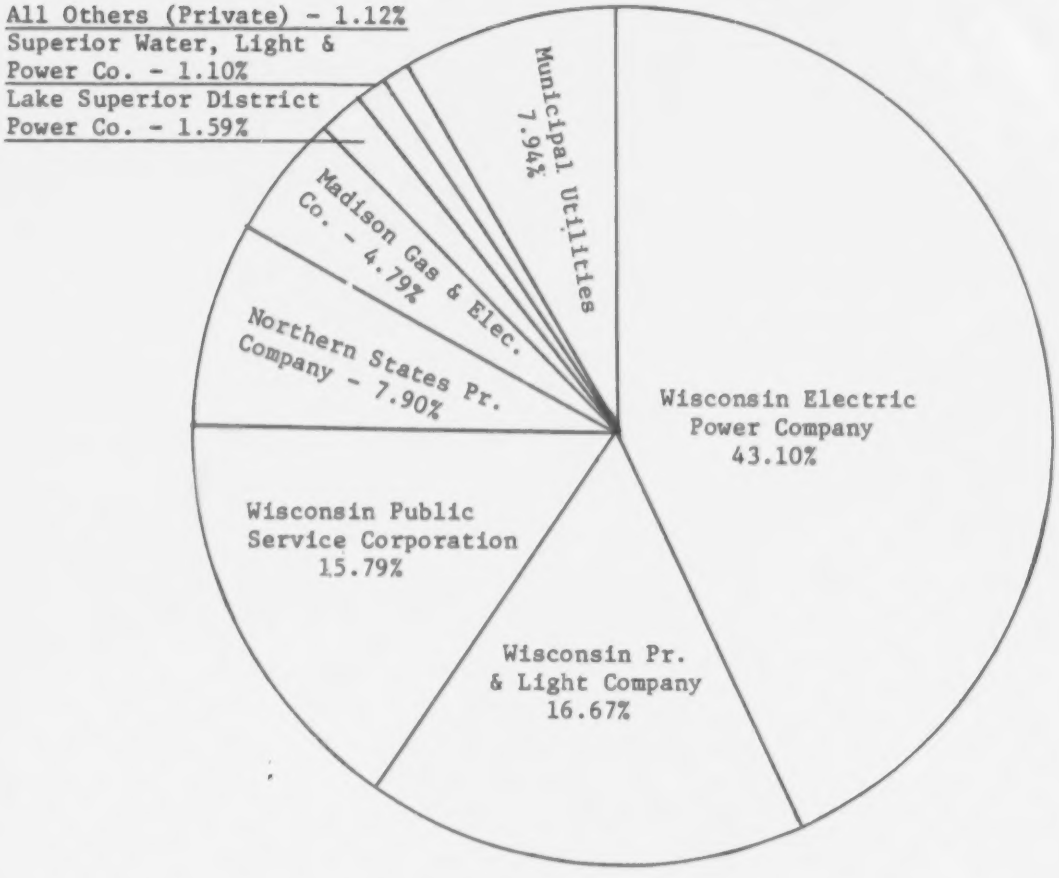
Data on Individual Utilities

Table 10 presents selected operating data covering the year 1982 for each Class A, B, and C private electric utility in the State and Table 11 presents similar data on each Class A, B, and C municipal electric utility. Chart 12 shows the percentage distribution by companies of electric operating revenue from sales to ultimate consumers. Four large private utilities account for 83% of the total. Municipal utilities make up 8%.

Table 10 shows that private utilities as a group generated a large part of their energy requirements while Table 11 shows that municipal utilities purchase most of their requirements. Of the 72 individual municipal utilities listed, only 15 generated some electricity.

CHART 12

Revenues of Wisconsin Electric Utilities
In Percent of Total Sales to Ultimate Consumers
1982


All Others (Private) - 1.12%
Superior Water, Light & Power Co. - 1.10%
Lake Superior District Power Co. - 1.59%
Municipal Utilities 7.94%
Madison Gas & Elec. Co. - 4.79%
Northern States Pr. Company - 7.90%
Wisconsin Electric Power Company 43.10%
Wisconsin Public Service Corporation 15.79%
Wisconsin Pr. & Light Company 16.67%

All Others:
Consolidated Water Power Co.
Northwestern Wis. Electric Co.
Dahlberg Light & Power Co.
North Central Power Co.
Class C Private

TABLE 4

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN ELECTRIC UTILITIES 1/
1982-1980

	1982	1981	1980
All Electric Utilities			
Operating Revenues			
Sales to Ultimate Consumers	$1,977,775,760	$1,734,305,240	$1,519,683,003
Sales to Other Utilities	166,930,918	153,168,224	155,626,108
Sales to Electric Cooperatives	11,435,933	9,404,232	8,101,511
Miscellaneous Revenues	53,558,297	46,323,290	51,554,755
Total Operating Revenues	$2,209,700,908	$1,943,200,986	$1,734,965,377
Operating Revenue Deductions			
Operation and Maintenance	$1,353,273,514	$1,219,760,574	$1,126,138,161
Depreciation and Amortization	193,028,585	198,863,603	181,291,329
Taxes Other than Income Taxes	84,146,200	77,514,482	63,816,410
Income Taxes	186,618,947	131,315,871	100,877,262
Total Operating Expenses	$1,817,067,246	$1,627,454,530	$1,472,123,162
Net Operating Revenues	$ 392,633,662	$ 315,746,456	$ 262,842,215
Private Electric Utilities			
Operating Revenues			
Sales to Ultimate Consumers	$1,805,272,601	$1,587,090,724	$1,385,499,676
Sales to Other Utilities	166,453,352	150,945,912	153,210,945
Sales to Electric Cooperatives	11,435,933	9,404,232	8,101,511
Miscellaneous Revenues	51,109,955	44,094,138	49,371,050
Total Operating Revenues	$2,034,271,841	$1,791,535,006	$1,596,183,182
Operating Revenue Deductions			
Operation and Maintenance	$1,193,897,609	$1,082,484,754	$1,003,000,330
Depreciation and Amortization	185,935,410	192,146,232	174,908,555
Taxes Other than Income Taxes	79,754,259	73,247,809	60,008,030
Income Taxes	186,618,947	131,315,871	100,877,262
Total Operating Expenses	$1,646,206,225	$1,479,194,666	$1,338,794,177
Net Operating Revenues	$ 388,065,616	$ 312,340,340	$ 257,389,005

(Continued)

TABLE 4 (Concluded)

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN ELECTRIC UTILITIES 1/
1982-1980

Municipal Electric Utilities	1982	1981	1979
Operating Revenues			
Sales to Ultimate Consumers	$ 172,503,159	$ 147,214,516	$ 134,183,327
Sales to Other Electric Utilities	477,566	2,222,312	2,415,163
Sales to Electric Cooperatives	0	0	0
Miscellaneous Operating Revenues	2,448,342	2,229,152	2,183,705
Total Operating Revenues	$ 175,429,067	$ 151,665,980	$ 138,782,195
Operating Revenue Deductions			
Operation and Maintenance	$ 159,375,905	$ 137,275,820	$ 123,137,831
Depreciation and Amortization	7,093,175	6,717,371	6,382,774
Taxes Other than Income Taxes	4,391,941	4,266,673	3,808,380
Total Operating Expenses	$ 170,861,021	$ 148,259,864	$ 133,328,985
Net Operating Revenues	$ 4,568,046	$ 3,406,116	$ 5,453,210

1/ Excluding out-of-state operations.

TABLE 5

SALES TO ULTIMATE CONSUMERS BY CLASS
WISCONSIN ELECTRIC UTILITIES 1/
1982-1980

	1982	1981	1979
All Electric Utilities			
Revenues			
Residential	$ 665,972,452	$ 569,502,284	$ 503,358,192
Commercial and Industrial	1,138,593,197	1,013,161,036	882,255,845
Rural	120,261,378	104,447,104	91,834,011
Public Street and Highway Lighting	31,307,908	28,779,469	25,670,402
Other Sales to Public Authorities	18,449,745	15,689,763	14,161,938
Interdepartmental Sales	3,191,080	2,725,584	2,402,615
Total Revenue from Ultimate Consumers	$1,977,775,760	$1,734,305,240	$1,519,683,003
Megawatt Hours Sold			
Residential	10,591,614	10,390,298	10,484,099
Commercial and Industrial	22,546,816	22,999,071	22,550,364
Rural	1,946,206	1,906,155	1,914,713
Public Street and Highway Lighting	443,373	468,384	482,305
Other Sales to Public Authorities	388,770	385,538	386,392
Interdepartmental Sales	67,054	63,692	64,257
Total Megawatt Hours Sold to Ultimate Consumers	35,983,833	36,213,138	35,882,130
Average Number of Customers 2/			
Residential	1,532,469	1,511,709	1,494,768
Commercial and Industrial	189,962	187,645	183,776
Rural	137,419	140,745	138,605
Public Street and Highway Lighting	3,335	3,347	3,337
Other Sales to Public Authorities	1,342	1,323	1,305
Interdepartmental Sales	108	110	110
Total Ultimate Consumers	1,864,635	1,844,879	1,821,901

(Continued)

TABLE 5 (Continued)

SALES TO ULTIMATE CONSUMERS BY CLASS
WISCONSIN ELECTRIC UTILITIES 1/
1982-1980

	1982	1981	1979
Private Electric Utilities			
Revenues			
Residential	$ 613,865,698	$ 525,658,522	$ 462,453,690
Commercial and Industrial	1,035,705,039	924,922,106	803,209,200
Rural	109,756,312	95,431,959	83,291,671
Public Street and Highway Lighting	27,792,998	25,678,743	22,746,541
Other Sales to Public Authorities	17,003,561	14,366,400	12,931,357
Interdepartmental Sales	1,148,993	1,032,994	867,217
Total Revenue from Ultimate Consumers	$1,805,272,601	$1,587,090,724	$1,385,499,676
Megawatt Hours Sold			
Residential	9,499,476	9,331,423	9,426,243
Commercial and Industrial	20,317,399	20,770,999	20,382,828
Rural	1,739,895	1,702,797	1,714,555
Public Street and Highway Lighting	390,839	417,663	432,055
Other Sales to Public Authorities	361,505	355,635	356,589
Interdepartmental Sales	22,591	23,238	23,073
Total Megawatt Hours Sold to Ultimate Consumers	32,331,705	32,601,755	32,335,343
Average Number of Customers 2/			
Residential	1,386,308	1,369,524	1,354,494
Commercial and Industrial	166,393	164,024	160,846
Rural	120,481	124,133	122,215
Public Street and Highway Lighting	3,197	3,209	3,200
Other Sales to Public Authorities	1,089	1,071	1,053
Interdepartmental Sales	7	9	9
Total Ultimate Consumers	1,677,475	1,661,970	1,641,817

(Continued)

TABLE 5 (Concluded)

SALES TO ULTIMATE CONSUMERS BY CLASS
WISCONSIN ELECTRIC UTILITIES 1/
1982-1980

	1982	1981	1980
Municipal Electric Utilities			
Revenues			
Residential	$ 52,106,754	$ 43,843,762	$ 40,904,502
Commercial and Industrial	102,888,158	88,238,930	79,046,645
Rural	10,505,066	9,015,145	8,542,340
Public Street and Highway Lighting	3,514,910	3,100,726	2,923,861
Other Sales to Public Authorities	1,446,184	1,323,363	1,230,581
Interdepartmental Sales	2,042,087	1,692,590	1,535,398
Total Revenue from Ultimate Consumers	$ 172,503,159	$ 147,214,516	$ 134,183,327
Megawatt Hours Sold			
Residential	1,092,138	1,058,875	1,057,856
Commercial and Industrial	2,229,417	2,228,072	2,167,536
Rural	206,311	203,358	200,158
Public Street and Highway Lighting	52,534	50,721	50,250
Other Sales to Public Authorities	27,265	29,903	29,803
Interdepartmental Sales	44,463	40,454	41,184
Total Megawatt Hours Sold to Ultimate Consumers	3,652,128	3,611,383	3,546,787
Average Number of Customers 2/			
Residential	146,161	142,185	140,274
Commercial and Industrial	23,569	23,621	22,930
Rural	16,938	16,612	16,390
Public Street and Highway Lighting	138	138	137
Other Sales to Public Authorities	253	252	227
Interdepartmental Sales	101	101	101
Total Ultimate Consumers	187,160	182,909	180,059

1/ Excluding out-of-state operations.
2/ Heating, cooking and yard lighting customers on separate rates are not included in customer data, as they would be duplications.

TABLE 6

COMPARATIVE STATEMENT OF OPERATION AND MAINTENANCE EXPENSES
WISCONSIN ELECTRIC UTILITIES 1/
1982-1980

	1982	1981	1980
All Electric Utilities			
Production Expense-Total Company			
Steam-Nuclear Fuel	$ 146,397,937	$ 106,425,181	$ 82,930,791
Steam-Fossil Fuel	561,864,245	517,099,082	480,924,384
Hydraulic	13,593,954	11,982,217	10,656,983
Int. Comb.-Recip. and Turbine	7,392,856	12,371,225	23,177,591
Purchases or Net Interchanges	334,209,365	296,832,284	291,135,695
Other Power Supply	13,997,600	13,108,977	7,258,511
Total Production Expense	$1,077,458,957	$ 957,818,966	$ 896,083,955
Amount Applicable to Out-of-State Sales	39,587,154	14,281,925	17,873,548
Amount Applicable to Wisconsin Sales	$1,037,871,803	$ 943,537,041	$ 878,210,407
Operation and Maintenance - Wisconsin Only			
Production	$1,037,871,803	$ 943,537,041	$ 878,210,407
Transmission 2/	20,267,055	16,075,414	15,480,835
Distribution 2/	102,595,951	92,104,748	87,035,383
Customer Accounts	44,704,199	36,542,110	31,650,169
Sales Promotion 3/	171,083	446,970	621,221
Customer Service	13,493,230	9,811,715	7,894,759
Administrative and General	134,170,193	121,242,577	105,245,387
Total	$1,353,273,514	$1,219,760,575	$1,126,138,161
Private Electric Utilities			
Production Expense - Total Company			
Steam-Nuclear Fuel	$ 146,397,937	$ 106,425,181	$ 82,930,791
Steam-Fossil Fuel	549,897,381	506,393,176	470,604,150
Hydraulic	13,123,435	11,527,653	10,189,030
Int. Comb.-Recip. and Turbine	6,739,011	11,465,277	21,349,972
Purchases or Net Interchanges	204,529,313	187,432,551	194,592,507
Other Power Supply	13,995,821	13,071,820	7,258,453
Total Production Expense	$ 934,682,898	$ 836,315,658	$ 786,924,903
Amount Applicable to Out-of-State Sales	39,587,154	14,281,925	17,873,548
Amount Applicable to Wisconsin Sales	$ 895,095,744	$ 822,033,733	$ 769,051,355
Operation and Maintenance - Wisconsin Only			
Production	$ 895,095,744	$ 822,033,733	$ 769,051,355
Transmission 2/	20,204,061	15,937,901	15,419,685
Distribution 2/	96,440,348	86,589,294	82,006,471
Customer Accounts	41,862,870	34,025,437	29,468,418
Sales Promotion	158,827	439,178	615,386
Customer Service	13,488,978	9,808,885	7,892,268
Administrative and General	126,646,781	113,650,326	98,546,747
Total	$1,193,897,609	$1,082,484,754	$1,003,000,330

TABLE 6 (Concluded)

COMPARATIVE STATEMENT OF OPERATION AND MAINTENANCE EXPENSES
WISCONSIN ELECTRIC UTILITIES 1/
1982-1980

	1982	1981	1980
Municipal Electric Utilities			
Production Expense			
Steam-Fossil Fuel	$ 11,966,864	$ 10,705,906	$ 10,320,234
Hydraulic	470,519	454,564	467,953
Int. Com.-Recip. and Turbine	653,845	905,948	1,827,619
Purchases or Net Interchanges	129,683,052	109,399,733	96,543,188
Other Power Supply	1,779	37,157	58
Total Production Expense	$ 142,776,059	$ 121,503,308	$ 109,159,052
Transmission 2/	62,994	137,512	61,150
Distribution 2/	6,155,603	5,515,454	5,028,912
Customer Accounts	2,841,329	2,516,673	2,181,751
Sales 3/	16,508	10,622	8,326
Administrative and General	7,523,412	7,592,251	6,698,640
Total	$ 159,375,905	$ 137,275,820	$ 123,137,831

1/ Out-of-state operations of Wisconsin Utilities are not included except in detail of production expenses, as indicated.
2/ Transmission and distribution expenses are combined in the Class D report forms. These utilities are assumed to have no transmission expense.
3/ Includes customer service expense of municipal utilities.

TABLE 7

SUMMARY OF MEGAWATT HOURS SOLD AND USED
WISCONSIN ELECTRIC UTILITIES
1982-1980

All Electric Utilities	1982	1981	1980
MWh Sold to Ultimate Customers (Wisconsin Only)	35,983,883	36,212,894	35,882,130
MWh Sold to Electric Coops.	331,981	307,764	296,699
Total MWh Sold in Wisconsin	36,315,751	36,520,658	36,178,829
MWh Used by Utilities	101,663	119,234	37,630
Total MWh Sold & Used in Wisconsin	36,417,414	36,639,892	36,216,459
MWh Sold Out of State			
Sales to Ultimate Consumers	520,405	549,486	787,152
Sales to Electric Utilities & Cooperatives	651,799	886,102	748,346
Total MWh Sold Out of State	1,172,204	1,435,588	1,535,498
MWh Used by Utilities Out of State	2,356	2,456	829
Total MWh Sold & Used Out of State	1,174,560	1,438,044	1,536,327
Total MWh Sold & Used 1/	37,591,974	38,077,936	37,752,786
MWh Unaccounted for	4,036,179	3,518,150	1,817,678
Total MWh Generated and Purchased 2/	41,628,153	41,596,086	39,570,464

(Continued)

TABLE 7 (Continued)

SUMMARY OF MEGAWATT HOURS SOLD AND USED
WISCONSIN ELECTRIC UTILITIES
1982-1980

	1982	1981	1980
Private Electric Utilities			
MWh Sold to Ultimate Customers (Wisconsin Only)	32,331,705	32,601,755	32,335,343
MWh Sold to Other Electric Cooperatives	331,918	307,764	296,699
Total MWh Sold to Ultimate Consumers and Cooperatives	32,663,623	32,909,519	32,632,042
MWh Used by Utilities in WI	97,793	115,868	33,750
Total MWh Sold & Used in Wisconsin 1/	32,761,416	33,025,387	32,665,792
MWh Sold Out of State			
Sales to Ultimate Consumers	520,405	549,486	787,152
Sales to Electric Utilities & Cooperatives	651,799	886,102	748,346
Total MWh Sold Out of State	1,172,204	1,435,588	1,535,498
MWh Used by Utilities Out of State	2,356	2,456	829
Total MWh Sold & Used Out of State	1,174,560	1,438,044	1,536,327
Total MWh Sold & Used 1/	33,935,976	34,463,431	34,202,119
MWh Unaccounted for	6,208,935	6,236,440	4,811,658
Total MWh Generated and Purchased 2/	40,144,911	40,699,871	39,013,777

(Continued)

TABLE 7 (Concluded)

SUMMARY OF MEGAWATT HOURS SOLD AND USED
WISCONSIN ELECTRIC UTILITIES
1982-1980

	1982	1981	1980
Municipal Electric Utilities			
MWh Sold to Ultimate Customers (Wisconsin Only)	3,652,128	3,611,139	3,546,787
MWh Sold to Electric Cooperatives	0	0	0
Total MWh Sold to Ultimate Consumers and Cooperatives	3,652,128	3,611,139	3,546,787
MWh Used by Utilities in WI	3,870	3,366	3,880
Total MWh Sold and Used in Wisconsin 1/	3,655,998	3,614,505	3,550,667
MWh Sold Out of State			
Sales to Ultimate Consumers	0	0	0
Sales to Electric Utilities & Cooperatives	0	0	0
Total MWh Sold Out of State	0	0	0
MWh Used by Utilities Out of State -	0	0	0
Total MWh Sold and Used Out of State	0	0	0
Total MWh Sold and Used 1/	3,655,998	3,614,505	3,550,667
MWh Unaccounted for	(2,172,756)	(2,718,290)	(2,993,980)
Total MWh Generated and Purchased 2/	1,483,242	896,215	556,687

1/ Electrical energy sold to other Wisconsin utilities were omitted from this table to avoid double counting.

2/ Electrical energy purchased from other Wisconsin utilities was omitted from this table to avoid double counting.

TABLE 8

MEGAWATT HOURS GENERATED AND PURCHASED
WISCONSIN ELECTRIC UTILITIES
1982-1980

	1982	1981	1980
All Electric Utilities			
Net Generation in Wisconsin			
Steam - Nuclear Fuel	10,132,203	10,103,260	9,697,654
Steam - Fossil Fuel	21,365,041	21,640,465	22,506,544
Hydraulic	1,865,149	1,609,754	1,561,421
Internal Combustion - Recip.	3,379	4,386	33,105
Internal Combustion - Turbine	43,344	189,575	354,647
Total	33,409,116	33,547,440	34,153,371
Net Generation Outside Wisconsin by Wisconsin Companies			
Hydraulic	502,859	525,720	488,905
Internal Combustion - Recip.	(23)	(56)	8
Total	502,836	525,664	488,913
Total Megawatt Hours Generated			
Steam - Nuclear Fuel	10,132,203	10,103,260	9,697,654
Steam - Fossil Fuel	21,365,041	21,640,465	22,506,544
Hydraulic	2,368,008	2,135,474	2,050,326
Internal Combustion - Recip.	3,356	4,330	33,113
Internal Combustion - Turbine	43,344	189,575	354,647
Total	33,911,952	34,073,104	34,642,284
Megawatt Hours Purchased Plus Net Interchanges 2/			
From Out of State Elec. Utilies 3/	5,217,483	5,281,616	3,946,398
From Elec. Cooperatives	2,496,141	2,237,787	387,429
From Other Non-Utility Companies	2,577	3,256	186,339
Total	7,716,201	7,522,659	4,520,166
Total Megawatt Hours Generated and Purchased	41,628,153	41,596,086	39,570,464
Tons of Coal Used in Steam Plants	11,482,067	11,205,502	11,538,407
Gallons of Fuel Oil Used in Steam Plants	9,835,476	12,909,876	22,423,590
Therms of Natural Gas Used in Steam Plants	38,211,847	49,681,037	98,667,731
Tons of Wood in Steam Plants	46,036	0	0
Gallons of Fuel Oil Used in Internal Combustion-Recip. Plants	96,620	156,665	591,346
Therms of Natural Gas Used in Internal Combustion-Recip. Plants	28,100	289,605	1,469,001
Gallons of Fuel Oil Used in Internal Combustion-Turbine Plts.	1,658,832	2,245,992	9,866,050
Therms of Natural Gas Used in Internal Combustion-Turbine Plts.	4,377,768	26,718,116	40,882,598

TABLE 8 (Continued)

MEGAWATT HOURS GENERATED AND PURCHASED
WISCONSIN ELECTRIC UTILITIES
1982-1980

Private Electric Utilities	1982	1981	1980
Net Generation in Wisconsin			
Steam - Nuclear Fuel	10,132,203	10,103,260	9,697,654
Steam - Fossil Fuel	21,171,605	21,447,545	22,297,994
Hydraulic	1,721,865	1,493,182	1,949,044
Internal Combustion - Recip.	525	375	1,211
Internal Combustion - Turbine	42,517	188,794	952,289
Total	33,068,715	33,233,156	33,798,192
Net Generation Outside Wisconsin by Wisconsin Companies			
Hydraulic	530,849	525,720	448,985
Internal Combustion - Recip.	(23)	(56)	0
Total	530,826	525,664	788,913
Total Megawatt Hours Generated			
Steam - Nuclear Fuel	10,132,203	10,103,260	9,697,654
Steam - Fossil Fuel	21,171,605	21,447,545	22,297,994
Hydraulic	2,252,714	2,018,902	1,937,344
Internal Combustion - Recip.	502	319	1,219
Internal Combustion - Turbine	42,517	188,794	952,289
Total	33,599,541	33,758,820	34,287,100
Megawatt Hours Purchased Plus Net Interchanges 2/			
From Out of State Elec. Utils. 3/	5,217,483	5,281,616	4,354,412
From Electric Cooperatives	1,327,887	1,659,435	348,337
From Other Non-Utility Companies	0	0	171,923
Total	6,545,370	6,941,051	4,716,672
Total Megawatt Hours Generated and Purchased	40,144,911	40,699,871	39,013,777
Tons of Coal Used in Steam Plants	11,324,957	11,367,743	11,309,644
Gallons of Fuel Oil Used in Steam Plants	9,835,476	12,909,876	22,413,580
Therms of Natural Gas Used in Steam Plants	38,211,847	49,681,037	98,667,731
Tons of Wood in Steam Plants	46,036	0	0
Gallons of Fuel Oil Used in Internal Combustion-Recip. Plants	51,647	39,847	172,518
Therms of Natural Gas Used in Internal Combustion-Recip. Plants	0	0	0
Gallons of Fuel Oil Used in Internal Combustion-Turbine Plts.	1,658,832	2,245,992	9,861,736
Therms of Natural Gas Used in Internal Combustion-Turbine Plts.	4,377,768	26,566,706	68,461,750

TABLE 8 (Concluded)

MEGAWATT HOURS GENERATED AND PURCHASED
WISCONSIN ELECTRIC UTILITIES
1982-1980

	1982	1981	1980
Municipal Electric Utilities			
Net Generation in Wisconsin			
Steam - Fossil Fuel	193,436	192,920	208,550
Hydraulic	115,294	116,572	112,377
Internal Combustion - Recip.	2,854	4,334	31,894
Internal Combustion - Turbine	827	781	2,358
Total	312,411	314,607	355,179
Megawatt Hours Purchased 2/			
From Electric Cooperatives	1,168,254	578,352	197,092
From Other Non-Utility Co.'s	2,577	3,256	4,416
Total	1,170,831	581,608	201,508
Total Megawatt Hours Generated and Purchased	1,483,242	896,215	556,687
Tons of Coal Used in Steam Plants	157,110	134,462	157,763
Gallons of Fuel Oil Used in Steam Plants	0	0	0
Therms of Natural Gas Used in Steam Plants	0	0	0
Gallons of Fuel Oil Used in Internal Combustion-Recip. Plants	134,569	117,618	478,828
Therms of Natural Gas Used in Internal Combustion-Recip. Plants	28,100	289,605	1,469,001
Gallons of Fuel Oil Used in Internal Combustion-Turbine Plants	0	0	4,324
Therms of Natural Gas Used in Internal Combustion-Turbine Plants	0	150,900	420,800

1/ Experimental generation using windmills and photo voltaics is being done by some utilities. These plants will be included in the Bulletin if and when they produce a significant amount of commercial power.

2/ Electrical energy purchased from other Wisconsin electric utilities was omitted from this table to aviod double counting.

3/ Includes purchases delivered in Wisconsin or at state line.

TABLE 9

GENERATING PLANT AND TRANSMISSION LINE DATA
WISCONSIN ELECTRIC UTILITIES
1982-1980

	1982	1981	1980
Capacity of Generators in Kilowatts			
All Plants in Wisconsin			
Steam - Nuclear Fuel	1,540,682	1,540,682	1,540,682
Steam - Fossil Fuel	6,559,766	6,572,092	6,250,666
Hydraulic	351,320	349,195	349,570
Internal Combustion - Recip.	101,983	102,634	102,471
Internal Combustion - Turbine	1,285,950	1,286,450	1,279,700
Total	9,839,701	9,851,053	9,523,089
Private Utility Plants in Wisconsin 2/			
Steam - Nuclear Fuel	1,540,682	1,540,682	1,540,682
Steam - Fossil Fuel	6,408,336	6,420,662	6,096,736
Hydraulic	332,445	330,450	330,825
Internal Combustion-Recip.	27,356	34,596	34,471
Internal Combustion-Turbine	1,265,950	1,266,450	1,259,700
Total	9,574,769	9,592,840	9,262,414
Municipal Utility Plants in Wisconsin			
Steam - Fossil Fuel	151,430	151,430	153,930
Hydraulic	18,875	18,745	18,745
Internal Combustion-Recip.	74,627	68,038	68,000
Internal Combustion-Turbine	20,000	20,000	20,000
Total	264,932	258,213	260,675
Plants Located Outside Wisconsin Operated by Wisconsin Utils. 1/			
Hydraulic	99,990	90,699	90,699
Internal Combustion-Recip.	5,042	5,042	5,042
Total	105,032	95,741	95,741
Total Plants Operated by Wisconsin Utilities			
Steam - Nuclear Fuel	1,540,682	1,540,682	1,540,682
Steam - Fossil Fuel	6,559,766	6,572,092	6,250,666
Hydraulic	451,310	439,894	440,269
Internal Combustion-Recip.	107,025	107,676	107,513
Internal Combustion-Turbine	1,285,950	1,286,450	1,279,700
Total	9,944,733	9,946,794	9,618,830
Miles of Transmission Pole or Tower (Including Out-of-State)			
Over 100,000 Volts	4,408	4,319	4,281
Less than 100,000 Volts	4,938	5,192	5,091

1/ Out-of-State plants are all owned by private electric utilities.
2/ Electrical energy purchased from other Wisconsin electric utilities was omitted from this table to aviod double counting.

TABLE 10

CONDENSED SUMMARY OF 1982 OPERATIONS
INDIVIDUAL PRIVATE ELECTRIC UTILITIES 1/

Utilities	Operating Revenues 2/	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Income Taxes	Net Operating Revenue	Total MWh Sold 2/	Average Number of Consumers 3/	MWh Generated 4/	MWh Purchased 4
Class A, B, and C										
Consolidated Water Power Co.	$ 13,295,623	$ 13,102,726	$ 369,954	$ 130,400	$ (149,776)	$ (157,681)	493,051	966	142,394	363,301
Dahlberg Light & Power Co.	3,980,531	3,089,807	230,880	103,853	189,212	366,779	51,756	5,390	2,479	56,693
Lake Superior District Power Co.	35,006,546	23,767,696	3,101,628	1,081,424	3,434,164	3,621,634	574,530	31,000	251,768	522,603
Madison Gas and Electric Co.	105,893,615	62,190,553	9,649,264	4,355,188	10,777,472	18,921,138	1,941,471	98,198	1,955,303	101,009
North Central Power Co.	1,097,205	602,753	80,415	51,381	97,669	264,987	18,018	2,934	14,517	5,538
Northern States Power Co.	174,614,188	121,350,293	16,590,974	4,546,067	13,656,477	18,470,377	3,248,845	145,068	926,803	2,763,142
Northwestern Wisconsin Electric Co.	5,273,298	3,546,308	471,544	173,932	251,683	829,831	89,918	6,851	11,688	89,939
Pioneer Power & Light Co.	712,853	622,331	39,583	16,460	5,947	28,532	15,388	1,293	0	16,423
Superior Water, Light & Power Co.	24,306,655	20,673,871	658,480	350,986	543,678	2,079,640	454,208	12,492	0	473,060
Wisconsin Electric Power Co.	952,334,845	554,184,958	89,447,378	41,051,641	89,316,311	178,334,557	16,829,963	793,234	16,800,651	1,567,323
Westfield Milling & Electric Light Co.	352,763	320,489	16,713	6,162	1,145	8,254	7,411	537	0	7,973
Wisconsin Power and Light Co.	368,339,459	209,978,949	32,002,567	14,647,764	43,304,122	68,406,057	6,970,662	300,296	6,902,640	594,439
Wisconsin Public Service Corp.	349,064,260	180,466,875	33,276,030	13,239,001	25,190,843	96,891,511	6,646,974	279,321	6,591,310	767,698
Grand Total	$2,034,271,841	$1,193,897,609	$185,935,410	$79,754,259	$186,618,947	$388,065,616	37,342,195	1,677,580	33,599,553	7,329,141

1/ Includes Interdepartmental Sales and Sales for Resale.
2/ Excluded Off-Peak Water Heating and Area Lighting Customers.

TABLE 11

CONDENSED SUMMARY OF 1982 OPERATIONS
INDIVIDUAL MUNICIPAL ELECTRIC UTILITIES 1/

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Net Operating Revenue	Total MWh Sold 1/	Average Number of Customers 2/	MWh Generated	MWh Purchased
Class A, B, and C									
Algoma	$ 1,567,443	$ 1,477,986	$ 32,299	$ 25,070	$ 32,088	28,387	1,780	0	28,922
Arcadia	1,061,294	908,718	83,555	47,428	21,593	25,961	1,151	375	26,302
Bangor	1,137,301	1,038,317	45,702	32,309	20,973	25,363	1,173	0	27,595
Barron	1,153,244	946,345	91,231	38,577	77,091	24,879	1,385	503	25,815
Black Earth	512,684	417,487	23,964	18,176	53,057	9,718	823	0	10,334
Black River Falls	1,381,321	1,214,217	73,241	51,538	42,325	34,141	2,178	5,264	31,035
Bloomer	1,261,813	1,152,938	32,642	20,737	55,496	29,824	1,539	0	31,214
Boscobel	1,129,731	1,023,849	38,894	27,552	39,436	22,035	1,562	0	23,004
Brodhead	1,025,667	903,290	30,034	23,035	69,308	20,799	1,502	0	22,063
Cedarburg	4,038,213	3,559,138	139,699	94,545	244,831	74,127	4,303	0	77,818
Clintonville	1,936,773	1,837,779	47,284	37,076	14,634	38,318	3,290	0	40,656
Columbus	1,586,191	1,440,388	53,900	38,010	53,893	31,843	1,949	0	35,131
Cornell	440,004	392,971	19,313	12,739	14,981	8,971	753	0	9,448
Cuba City	597,861	559,782	33,067	13,240	(8,228)	12,160	997	0	13,027
Cumberland	1,382,955	895,238	175,352	85,398	226,967	19,674	1,103	237	21,695
Deerfield	462,325	460,752	23,306	16,410	(38,143)	8,081	613	0	8,909
Eagle River	1,026,714	952,511	29,140	21,873	23,190	19,062	1,204	0	20,342
Elkhorn	2,615,938	2,414,189	88,011	41,018	72,720	48,467	2,409	0	51,753
Elroy	545,293	456,673	41,738	16,780	30,102	13,351	781	16	14,084
Evansville	1,721,187	1,594,790	50,375	31,409	44,613	34,664	2,446	0	36,634
Fennimore	861,995	780,943	45,975	22,044	13,033	17,825	1,143	112	18,990
Florence	390,137	342,264	22,617	9,485	15,771	7,327	754	0	7,957
Gresham	381,944	310,697	42,873	24,510	3,864	8,692	843	3,544	6,064
Hartford	2,747,417	2,481,329	66,930	59,243	139,915	54,415	2,939	0	57,656
Hazel Green	321,878	281,140	13,687	11,453	15,598	5,802	518	0	6,182
Hustisford	633,461	547,490	43,631	22,787	19,553	11,330	1,000	0	12,492
Jefferson	3,709,535	3,522,575	67,151	45,613	74,196	82,107	3,181	0	83,408
Juneau	1,036,859	925,368	45,712	27,045	38,734	21,632	763	0	22,368
Kaukauna	15,045,616	13,950,086	608,471	376,534	110,525	430,873	8,511	105,456	341,963
Kiel	1,523,035	1,418,585	55,168	31,638	17,644	29,141	1,542	0	32,305
Lake Mills	1,995,479	1,915,532	72,348	37,979	(30,380)	40,238	3,205	0	42,529
Lodi	604,381	568,037	25,246	13,441	(2,343)	12,274	996	0	12,974
Manitowoc	13,510,455	13,098,303	554,798	365,729	(508,375)	265,004	14,180	62,746	215,609
Marshfield	10,848,548	9,798,962	464,120	321,910	263,556	210,204	9,334	63,703	158,409
Medford	2,493,675	2,261,424	78,210	48,078	105,963	53,544	2,429	0	56,279

TABLE 11 (Concluded)

CONDENSED SUMMARY OF 1982 OPERATIONS
INDIVIDUAL MUNICIPAL ELECTRIC UTILITIES 1/

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Net Operating Revenue	Total MWh Sold 1/	Average Number of Customers 2/	MWh Generated	MWh Purchased
Menasha	6,130,429	5,382,683	426,146	300,509	21,091	113,164	6,353	42,222	75,528
Mount Horeb	1,385,961	1,249,316	80,043	35,666	20,936	28,189	1,993	0	30,571
Muscoda	723,258	624,023	36,588	23,337	39,310	12,254	875	0	14,004
Mazomanie	361,912	337,956	18,407	9,284	(3,735)	6,995	674	0	7,217
New Glarus	584,296	562,209	15,183	9,270	(2,366)	13,125	840	0	13,764
New Holstein	2,406,166	2,279,560	78,915	37,351	10,340	42,205	2,062	0	44,448
New Lisbon	597,052	420,634	58,270	35,683	82,465	9,955	688	573	10,147
New London	5,718,170	5,172,573	80,233	73,404	391,960	119,609	2,884	0	123,117
New Richmond	1,596,367	1,399,382	50,539	32,875	113,571	38,287	2,108	0	39,660
Oconomowoc	5,084,953	4,468,841	177,766	126,300	312,046	105,114	5,278	0	108,383
Oconto Falls	738,761	694,079	28,306	18,228	(1,852)	14,616	1,180	0	15,758
Pardeeville	545,659	494,525	18,200	9,924	23,010	11,095	935	104	11,851
Plymouth	4,873,389	4,394,435	209,961	118,807	150,186	101,238	5,087	0	109,296
Prairie du Sac	682,730	585,425	31,966	16,682	48,657	12,159	1,003	0	13,221
Princeton	460,575	453,193	20,229	10,667	(23,514)	8,895	880	0	9,796
Reedsburg	3,073,923	2,879,502	58,922	36,934	98,565	68,259	2,670	0	72,083
Rice Lake	3,695,813	3,183,287	165,747	97,703	249,076	83,539	3,880	0	88,294
Richland Center	3,327,660	2,932,319	173,666	110,791	110,884	59,306	2,706	24,765	37,130
River Falls	2,733,236	2,182,656	210,231	111,516	228,833	58,929	3,869	2,153	60,058
Sauk City	1,097,974	977,773	34,149	18,334	67,718	20,360	1,261	0	22,789
Shawano	5,626,129	5,154,488	141,708	89,250	240,683	125,588	4,042	0	129,208
Sheboygan Falls	3,742,022	3,357,290	98,548	45,423	240,761	84,308	2,760	0	88,362
Shullsburg	422,901	366,572	15,882	11,079	29,368	7,726	699	0	8,327
Slinger	583,495	527,033	19,573	7,673	29,216	10,700	745	0	11,765
Spooner	818,083	759,540	21,357	14,218	22,968	17,490	1,432	0	19,078
Stoughton	3,390,125	3,118,627	131,388	81,900	58,210	67,881	5,184	0	74,657
Sturgeon Bay	5,903,938	5,239,096	345,214	162,171	157,457	104,917	5,976	0	109,152
Sun Prairie	3,728,504	3,308,699	149,025	85,528	185,252	78,425	5,072	0	82,782
Two Rivers	3,561,756	3,333,759	117,961	77,220	32,816	64,454	5,591	0	69,208
Waterloo	1,559,866	1,480,116	25,925	19,263	34,562	31,770	1,233	0	33,414

TABLE 11 (Concluded)

CONDENSED SUMMARY OF 1982 OPERATIONS
INDIVIDUAL MUNICIPAL ELECTRIC UTILITIES 1/

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Net Operating Revenue	Total MWh Sold 1/	Average Number of Customers 2/	MWh Generated	MWh Purchased
Waunakee	1,155,445	1,078,053	58,039	28,455	(9,102)	27,438	1,633	0	29,220
Waupun	2,473,934	2,264,861	70,317	41,664	97,092	51,975	3,180	0	55,065
Westby	607,675	526,742	24,682	12,551	43,700	13,707	867	0	14,584
Whitehall	644,089	575,074	25,407	16,543	27,065	14,346	833	0	15,029
Wisconsin Dells	1,377,546	1,240,777	63,107	29,605	44,057	26,944	1,497	0	29,407
Wisconsin Rapids	8,151,422	7,666,565	298,118	252,212	(65,473)	155,057	10,204	0	162,394
Wonewoc	248,162	226,949	7,747	2,856	10,610	4,832	576	0	5,646
Subtotal	$172,501,743	$156,748,705	$6,947,149	$4,321,285	$4,484,604	3,595,084	183,029	311,773	3,475,379
Class D									
13 Utilities	2,927,324	2,627,200	146,026	70,656	83,442	59,797	5,437	638	63,041
Grand Total	$175,429,067	$159,375,905	$7,093,175	$4,391,941	$4,568,046	3,654,881	188,466	312,411	3,538,420

1/ Includes Interdepartmental Sales and Sales for Resale.
2/ Excluded Off-Peak Water Heating and Area Lighting Customers.

GAS UTILITY SUMMARY

Comparative statistics of the gas utility industry in Wisconsin for the three year period 1982-1980 are presented in this section. The following tables and charts deal with gas utility operations:

Table 12 - Comparative Statement of Revenues and Expenses, 1982-1980
Table 13 - Sales to Ultimate Consumers by Classes, 1982-1980.
Table 14 - Operating and Plant Statistics, 1982-1980.
Table 15 - Condensed Summary of 1982 Operations - Individual Utilities.

Chart 13 - Comparison of Revenues and Expenses, Wisconsin Gas Utilities, 1973-1982.
Chart 14 - Residential Revenue and Consumption Ratios, Wisconsin Gas Utilities, 1973-1982.
Chart 15 - Revenue of Individual Gas Utilities, Percent of Total Sales to Ultimate Consumers, 1982.

Gas Utility Revenues and Expenses

Table 12 and Chart 13 show that gas utility revenues in 1982 were up about 15.1% from the previous year. Expense rose 14.7% during the same period. Therms sold to ultimate consumers decreased 2.4% while the number of ultimate (retail) consumers increased 0.9%.

Sales to Ultimate Consumers

Table 13 summarizes sales to ultimate consumers. Percentage changes in 1982 by principle classes of service are given below:

	% Change From 1981 to 1982		
	Revenues	Therms Sold	Number of Customers
Residential - General	10.5%	(5.0)%	(5.0)%
Residential - Space Heating	26.3	6.5	1.7
Commercial and Industrial - Firm	7.8	(7.8)	(4.1)
Commercial and Industrial - Interr.	(0.3)	(13.1)	(5.1)
Commercial and Industrial - Sp. Htg.	6.0	6.0	1.9
Total Sales to Ultimate Consumers	15.3%	(2.4)%	0.9%

The number of residential space heating customers rose 1.7% during 1982. Since many of these customers formerly took service as residential general customers, a decline occurred in the number served in that classification. Commercial and industrial space heating customers rose while there was a decline in firm customers. Overall the number of commercial and industrial customers was up about 1.1%.

The decline in therms sold to residential-general consumers was due to the reduction in customers.

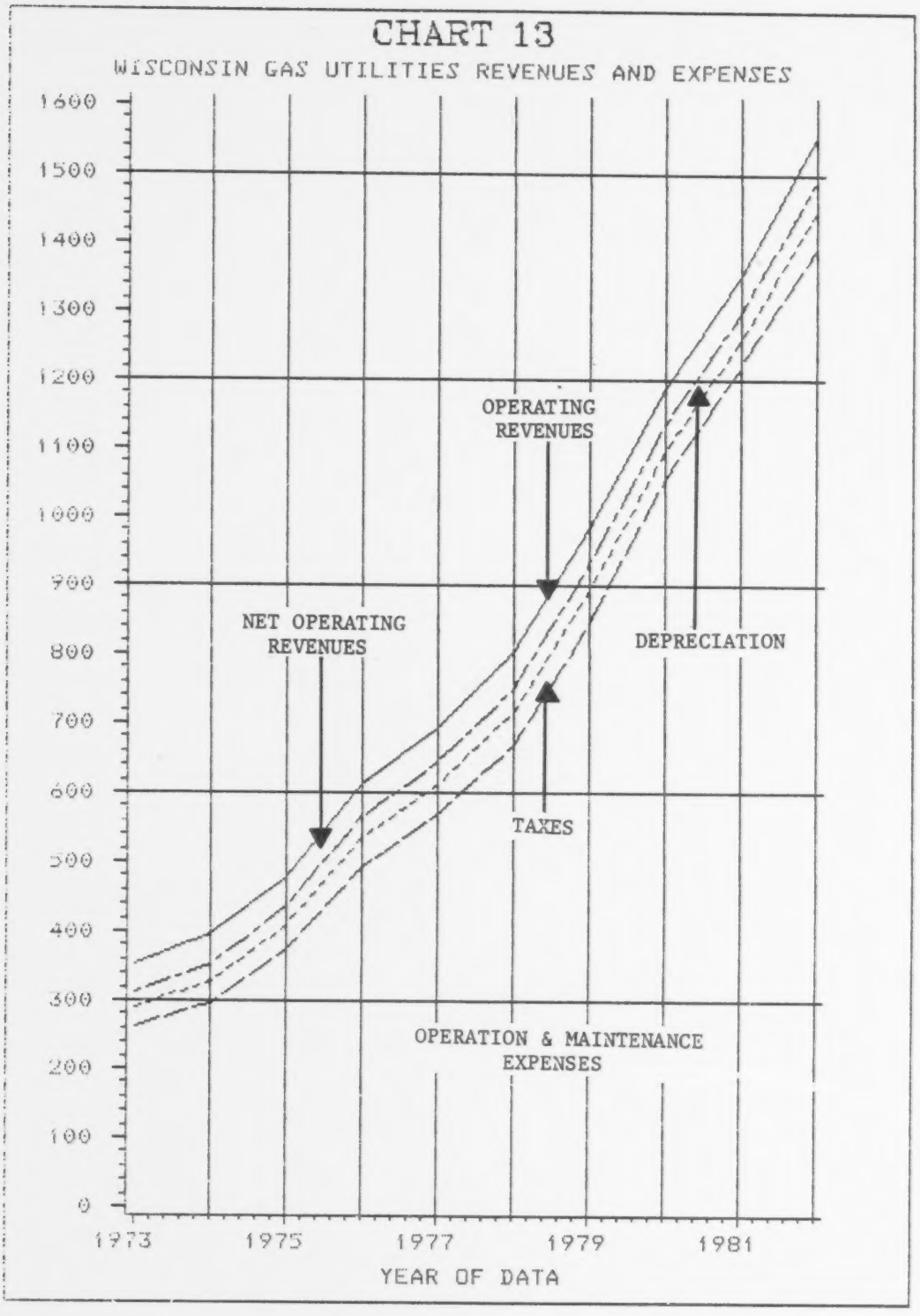


CHART 13
WISCONSIN GAS UTILITIES REVENUES AND EXPENSES
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
OPERATING REVENUES
NET OPERATING REVENUES
DEPRECIATION
TAXES
OPERATION & MAINTENANCE EXPENSES
1973
1975
1977
1979
1981
YEAR OF DATA

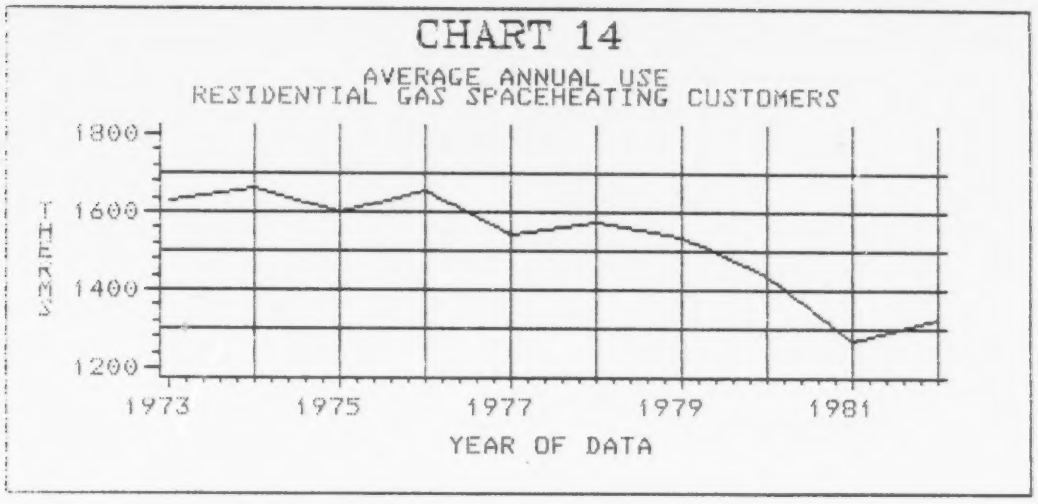
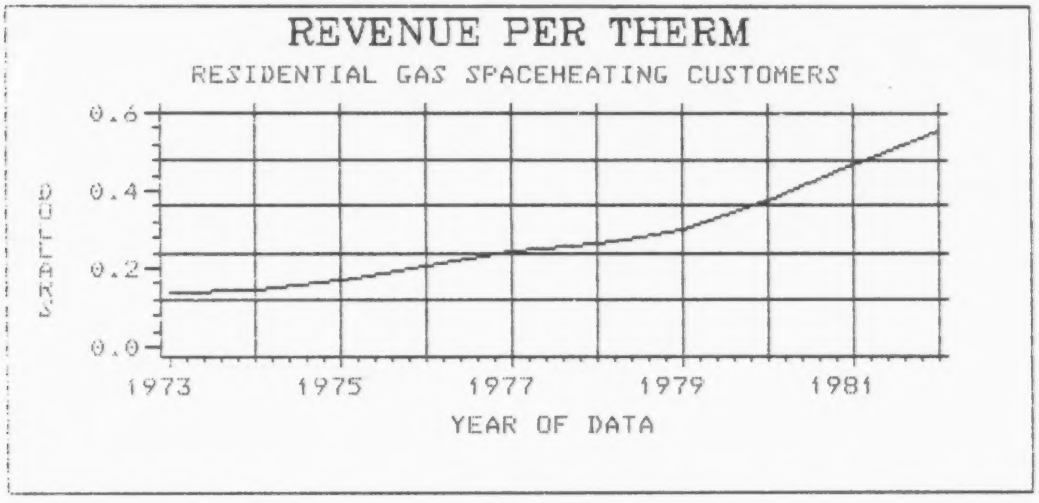


CHART 14
AVERAGE ANNUAL USE
RESIDENTIAL GAS SPACEHEATING CUSTOMERS
1800
1600
1400
1200
1973
1975
1977
1979
1981
YEAR OF DATA


REVENUE PER THERM
RESIDENTIAL GAS SPACEHEATING CUSTOMERS
0.6
0.4
0.2
0.0
1973
1975
1977
1979
1981
YEAR OF DATA

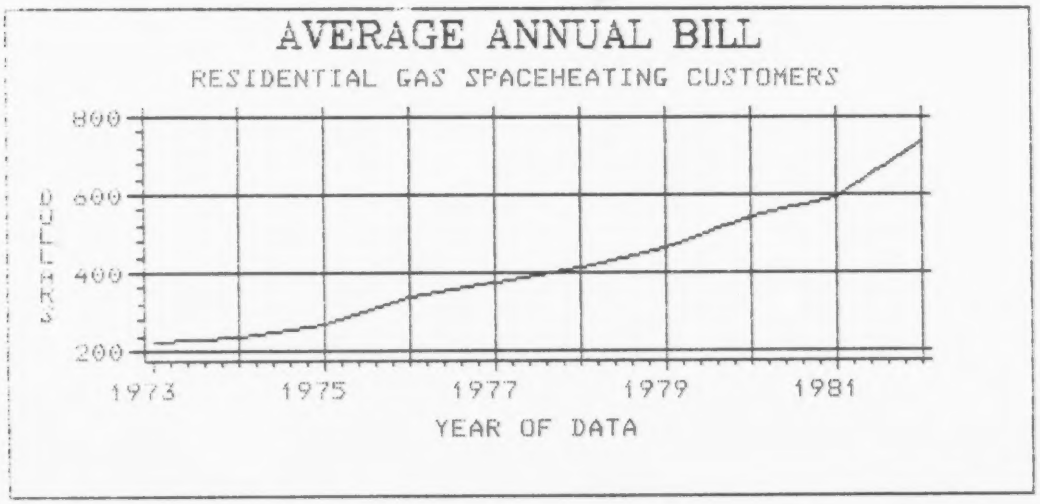
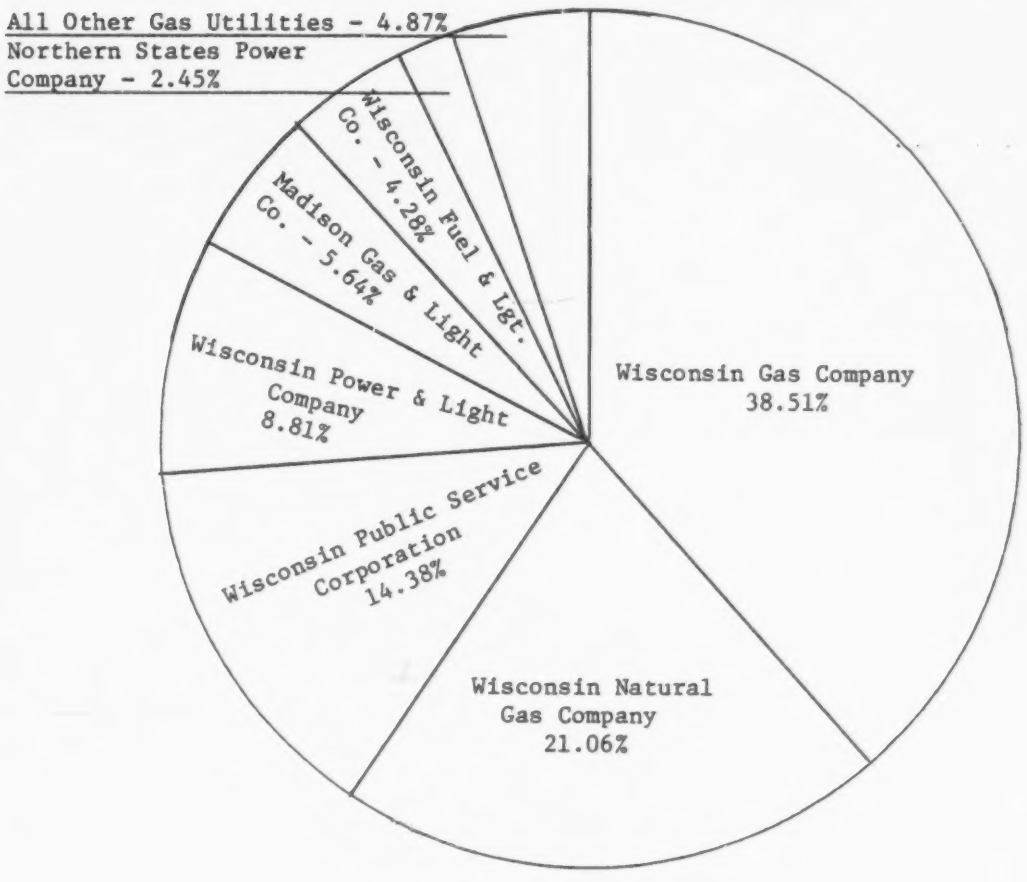

AVERAGE ANNUAL BILL
RESIDENTIAL GAS SPACEHEATING CUSTOMERS
800
600
400
200
1973
1975
1977
1979
1981
YEAR OF DATA

CHART 15

Revenues of Wisconsin Gas Utilities
In Percent of Total Sales to Ultimate Consumers
1982


All Other Gas Utilities - 4.87%
Northern States Power Company - 2.45%
Wisconsin Fuel & Lgt. Co. - 4.28%
Madison Gas & Light Co. - 5.64%
Wisconsin Power & Light Company 8.81%
Wisconsin Public Service Corporation 14.38%
Wisconsin Natural Gas Company 21.06%
Wisconsin Gas Company 38.51%

Other Gas Utilities:
- Wisconsin Southern Gas Co.
- Lake Superior District Power Co.
- Superior Water, Light & Power Co.
- Midwest Natural Gas Co.
- City Gas of Antigo
- Muny Gas Co. (Municipal)
- Class C Private

Revenue and Consumption Ratios

The following table shows average revenue per therm, therms sold per customer and revenue per customer for each of the principle classes of service.

	1982	1981	1980
Revenue Per Therm			
Residential - General	63.4¢	54.4¢	42.5¢
Residential - Space Heating	55.5	46.9	37.8
Commercial and Industrial - Firm	46.9	40.1	32.6
Commercial and Industrial - Interruptible	42.0	36.6	30.1
Commercial and Industrial - Space Heating	49.2	42.3	34.5
Therms Per Customer			
Residential - General	362	362	406
Residential - Space Heating	1,326	1,266	1,437
Commercial and Industrial - Firm	45,965	47,842	48,158
Commercial and Industrial - Interruptible	435,343	475,551	644,076
Commercial and Industrial - Space Heating	7,908	7,604	8,829
Revenue Per Customer			
Residential - General	$ 229	$ 197	$ 173
Residential - Space Heating	737	593	544
Commercial and Industrial - Firm	21,546	19,174	15,707
Commercial and Industrial - Interrupt.	182,828	174,015	194,163
Commercial and Industrial - Space Heating	3,891	3,220	3,049

Revenue per therm increased for all customer classifications in 1982. Therms sold per customer increased for all classes but commercial and industrial firm and interruptible classes. Revenue per customer increased for all classes of service. Chart 14 presents a comparison of average residential bills and consumption over a 10-year period. Although consumption has remained relatively constant in recent years the cost per therm and the total bills have increased sharply.

Gas Utility Plant Statistics

Table 14 supplies a summary of operating and plant statistics of the gas utility industry in Wisconsin. Over 99.9% of the 3,126 million therms delivered to mains in 1982 was natural gas. Almost 19,345 miles of main were in service at the close of 1982, exclusive of that owned by the pipeline companies. This represents a 0.7% increase over a year earlier.

Data on Individual Utilities

Individual company statistics for 1982 are presented in Table 15. Chart 15 shows a breakdown by company of total sales to ultimate consumers. The Wisconsin Gas Company accounted for 38.5% of total sales revenue from ultimate consumers and the five largest utilities made up 88.4% of the total.

TABLE 12

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN GAS UTILITIES 1/
1982-1980

	1982	1981	1980
Operating Revenues			
Sales to Ultimate Consumers	$1,541,089,692	$1,336,542,388	$1,174,687,366
Sales to Other Gas Utilities	4,630,851	4,591,867	2,562,392
Total Sales of Gas	$1,545,720,543	$1,341,134,255	$1,177,249,758
Other Operating Revenues	10,040,276	10,935,925	8,939,464
Total Operating Revenues	$1,555,760,819	$1,352,070,180	$1,186,189,222
Operating Expenses			
Production			
Liquified Petroleum Gas	$ 292,011	$ 233,813	$ 200,743
Purchased Gas - Natural	1,239,917,539	1,088,028,151	939,833,682
Storage	895,948	673,028	766,231
Total Production and Expense	$1,241,105,498	$1,088,934,992	$ 940,800,656
Transmission and Distribution	51,263,259	47,237,798	44,168,981
Customer Accounts	33,660,943	27,185,499	21,425,481
Customer Services	16,138,740	10,666,893	8,382,282
Sales Promotion	927,059	1,020,627	893,245
Administrative and General	50,767,201	45,370,616	39,900,405
Total Operation and Maintenance	$1,393,862,700	$1,220,416,425	$1,055,571,050
Depreciation 2/	43,883,011	41,507,602	38,656,219
Taxes Other than Income Taxes	19,359,227	18,461,759	16,093,733
Income Taxes	35,074,436	20,605,252	25,101,885
Total Operating Expenses	$1,492,179,374	$1,300,991,038	$1,135,422.887
Net Operating Revenues	$ 63,581,445	$ 51,079,142	$ 50,766,335

1/ Excluding out-of-state operations except where noted.
2/ Including amortization of plant acquisition adjustments, conversion costs, and other utility plant not subject to charges for depreciation.

TABLE 13

SALES TO ULTIMATE CUSTOMERS BY CLASSES
WISCONSIN GAS UTILITIES 1/
1982-1980

	1982	1981	1980
Revenue from Gas Sold to Ultimate Consumers			
Residential - General	$ 23,608,319	$ 21,363,037	$ 20,619,554
Residential - Space Heating	643,031,132	509,216,977	451,685,890
Commercial and Industrial - Firm	201,438,349	186,832,872	169,337,129
Commercial and Industrial - Interruptible	346,275,960	347,333,351	285,226,088
Commercial and Industrial - Space Heating	320,619,541	260,363,363	233,801,620
Interdepartmental	6,116,391	11,432,788	14,017,085
Total	$1,541,089,692	$1,336,542,388	$1,174,687,366
Therms of Gas Sold to Ultimate Consumers			
Residential - General 2/	37,265,639	39,244,547	48,478,107
Residential - Space Heating	1,157,750,061	1,086,779,939	1,193,977,127
Commercial and Industrial - Firm	429,722,484	466,170,105	519,187,164
Commercial and Industrial - Interruptible	824,540,047	949,200,299	946,148,251
Commercial and Industrial - Space Heating	651,660,418	614,838,494	676,934,740
Interdepartmental	14,652,253	35,689,993	50,38:,039
Total	3,115,590,902	3,191,923,377	3,435,106,428
Average Number of Customers			
Residential - General 2/	103,028	108,453	119,492
Residential - Space Heating	872,768	858,340	830,709
Commercial and Industrial - Firm	9,349	9,744	10,781
Commercial and Industrial - Interruptible	1,894	1,996	1,469
Commercial and Industrial - Space Heating	82,404	80,853	76,673
Interdepartmental	9	9	9
Total	1,069,452	1,059,395	1,039,133

1/ Excluding out-of-state operations.
2/ The decline in residential consumption and customers is due to the transfer of residential customers to the space heating classification when gas furnaces are installed.

TABLE 14

OPERATING AND PLANT STATISTICS
WISCONSIN GAS UTILITIES 1/
1982-1980

	1982	1981	1980
Disposition of Gas Delivered to Mains (Therms)			
Gas Sold in Wisconsin			
To Ultimate Consumers	3,115,590,902	3,191,923,377	3,435,106,428
To Other Gas Utilities	11,334,000	10,845,000	11,895,000
Total	3,126,924,902	3,202,768,377	3,447,001,428
Gas Used by Company	6,469,885	6,252,766	6,328,768
Total Sold and Used	3,133,394,787	3,209,021,143	3,453,330,196
Gas Unaccounted for	(7,220,333)	(12,365,309)	(12,168,827)
Gas Delivered to Mains	3,126,174,454	3,196,655,834	3,441,161,369
Percentage of Gas Unaccounted for	(0.23)%	(0.39)%	(0.35)%
Gas Produced (Therms)			
Liquefied Petroleum Gas	129,924	80,623	103,782
Natural Gas Purchased (Therms)			
From Michigan-Wisconsin Pipe Line Company	2,754,481,376	2,819,382,558	3,055,271,141
From Natural Gas Pipe Line Co.	75,777,670	73,792,598	77,930,015
From Midwest Gas Transmission Company	29,128,618	35,661,097	38,782,622
From Northern Natural Gas Company	267,495,772	268,961,395	268,487,535
Total Natural Gas Purchased	3,126,883,436	3,197,797,648	3,440,471,313
Total Gas Produced and Purchased	3,127,013,360	3,197,878,271	3,440,575,095
Net Inventory Change	(838,906)	(1,222,437)	586,274
Gas Delivered to Mains	3,126,174,454	3,196,655,834	3,441,161,369
Miles of Distribution and Transmission Mains 2/	19,345	19,214	19,039

1/ Excluding out-of-state operations.
2/ Not including transmission mains owned by pipeline companies.

TABLE 15

CONDENSED SUMMARY OF 1982 OPERATIONS
INDIVIDUAL GAS UTILITIES 1/

Utilities	Operating Revenue 2/	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Income Taxes	Net Operating Revenues	Therms Sold 2/	Therms Produced	Therms Purchased 3/	Therms Produced and Purchased	Average Number of Customers 2
Class A and B											
City Gas Co. of Antigo	$ 4,497,515	$ 4,239,778	$ 73,527	$ 45,922	$ 33,173	$ 105,115	9,360,312	0	9,209,937	9,209,937	3,319
Lake Superior District Power Co.	12,511,296	11,716,289	186,849	114,115	206,620	287,423	30,554,969	0	29,747,133	29,747,133	7,064
Madison Gas & Elec. Co.	87,740,211	75,271,663	3,829,555	1,704,004	1,982,052	4,952,937	166,370,721	8,454	165,880,539	165,888,993	67,823
Midwest Natural Gas Co.	4,798,598	4,450,140	109,717	46,025	73,300	119,416	11,098,820	963	11,154,493	11,155,456	3,620
Northern States Power Co.	38,044,606	32,861,354	1,487,189	441,738	1,294,306	1,960,019	70,562,373	0	73,029,702	73,029,702	31,200
Superior Water, Light & Power Co.	10,967,681	9,631,807	380,740	169,143	351,411	434,580	21,238,244	22,543	21,284,583	21,307,126	8,908
Wisconsin Fuel & Light Co.	66,575,969	62,029,150	1,193,350	556,896	1,058,417	1,738,156	145,240,960	0	145,065,260	145,065,260	37,203
Wisconsin Gas Company	599,086,217	536,626,109	16,726,713	7,440,961	13,088,345	25,204,089	1,185,897,000	0	1,186,014,839	1,186,014,839	406,018
Wisconsin Natural Gas Company	327,700,949	290,783,524	9,609,205	4,442,170	8,450,090	14,415,960	657,264,643	0	657,638,713	657,638,713	216,036
Wisconsin Power & Light Co.	137,060,492	121,367,052	4,507,164	1,781,567	4,282,440	5,122,269	259,924,000	18,709	253,907,406	253,926,115	99,111
Wisconsin Public Service Corp.	223,721,611	207,186,093	4,558,807	1,963,612	3,021,100	6,991,999	472,408,561	0	476,405,651	476,405,651	147,554
Wisconsin Southern Gas Co.	36,791,498	31,841,747	1,051,450	576,266	1,182,815	2,139,220	83,120,684	77,243	83,695,264	83,772,507	37,069
Subtotal	$1,549,496,643	$1,388,004,706	$43,714,266	$19,282,419	$35,024,069	$63,471,183	3,113,041,287	127,912	3,113,033,520	3,113,161,432	1,064,925
Class C 5/											
Elroy Gas, Inc.	848,382	848,350	15,348	14,550	(4,248)	(25,618)	1,869,546	0	1,839,644	1,839,644	467
Muny Natural Gas Co. 4/	1,231,664	1,141,379	17,434	12,476	0	60,375	2,960,500	0	2,934,070	2,934,070	752
Natural Gas. Inc.	1,403,322	1,309,721	47,857	14,860	6,140	24,744	3,117,660	0	3,119,540	3,119,540	681
St. Croix Valley Natural Gas Co.	2,780,808	2,558,544	88,106	34,922	48,475	50,761	5,935,909	2,012	5,956,662	5,958,674	2,628
Subtotal	$ 6,264,176	$ 5,857,994	$ 168,745	$ 76,808	$ 50,367	$ 110,262	13,883,615	2,012	13,849,916	13,851,928	4,528
Total All Utilities	$1,555,760,819	$1,393,862,700	$43,883,011	$19,359,227	$35,074,436	$63,581,445	3,126,924,902	129,924	3,126,883,436	3,127,013,360	1,069,453

( ) Denotes Negative Figure.
1/ Data includes Wisconsin operations only.
2/ Includes Interdepartmental Sales and Sales for Resale.
3/ Out-of-state sales by Lake Superior District Power and Wisconsin Public Service Corporation were subtracted from the therms purchased figure to give an estimated figure for Wisconsin only.
4/ Municipally owned.
5/ There are no Class D gas utilities.

TELEPHONE UTILITY SUMMARY

Comparative statistics of telephone utilities in Wisconsin during the period 1980-1982 are presented in this session. In addition, selected data over a 10-year period are presented in Chart 16. The coverage is summarized below:

Table 16 - Comparative Statement of Revenues and Expenses, Wisconsin Telephone Utilities, 1982-1980
Table 17 - Access Lines served by Wisconsin Telephone Utilities, 1982
Table 18 - Condensed Summary of 1982 Operations, Individual Telephone Utilities

Chart 16 - Comparison of Revenues and Expenses, Wisconsin Telephone Utilities, 1973-1982

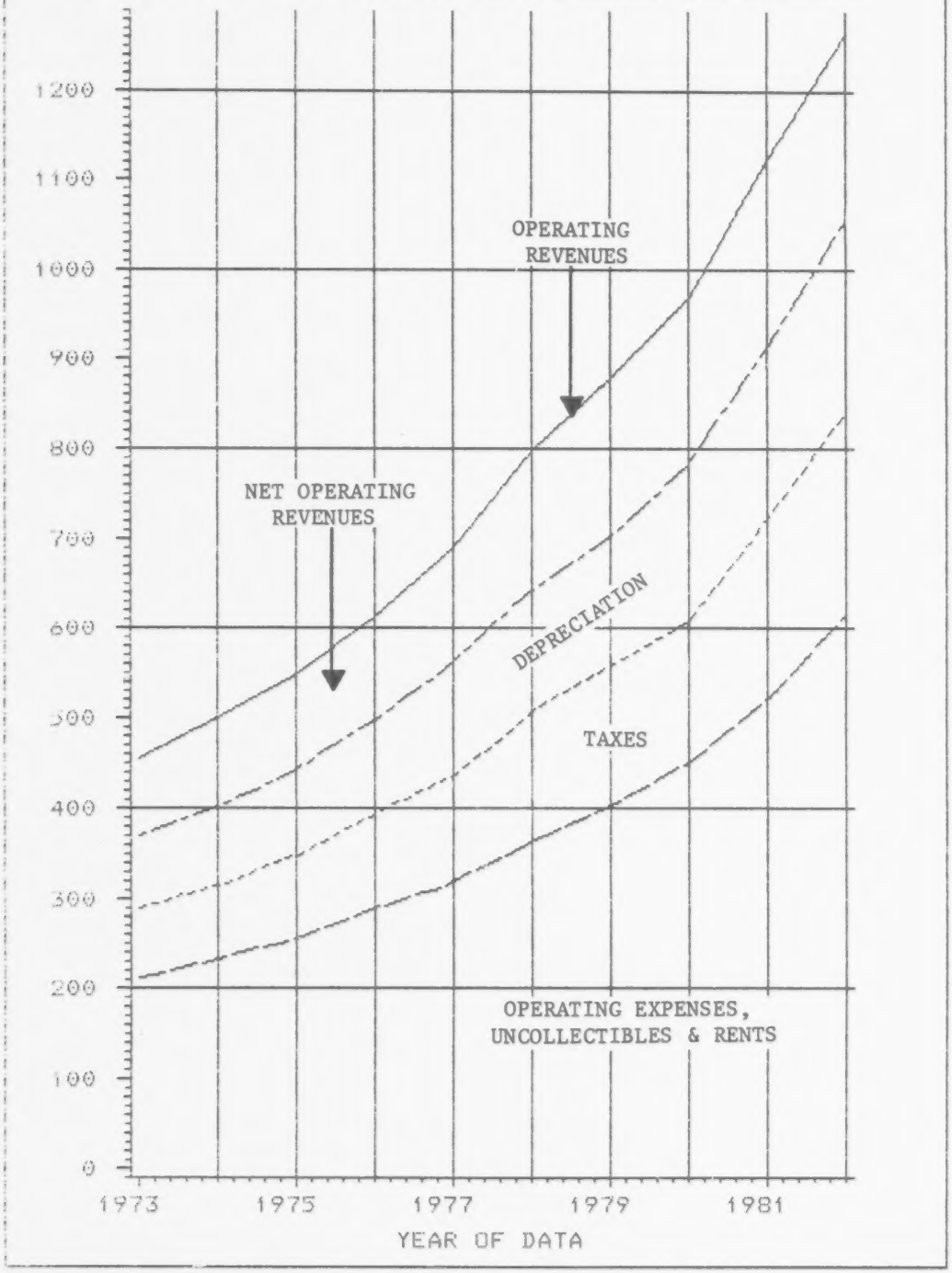
Telephone Utility Revenues and Expenses

Table 16 shows that telephone revenues in Wisconsin rose over $142.2 million in 1982, a rise of 12.7%. Total operating expenses were up about $144.7 million and net operating revenue were down about $2.42 million or 1.2%.

Local service revenues increased more rapidly than toll service revenues during the year, rising 13.9% as compared to 11.6%. All major categories of expense rose during the year except general services and licenses which showed a decrease of 4.2%.

CHART 16

WISCONSIN TELEPHONE UTILITIES REVENUES AND EXPENSES



Access Line Data

Access Line data is presented in Table 17. About 2.2 million access lines were in service at the close of 1982. Approximately 79% are used by residential subscribers, 20% by business subscribers and 1% representing miscellaneous customers such as foreign exchange in and other common carrier connections.

Individual Companies

Table 18 presents individual company data for each of the 100 companies operating in the State. The Wisconsin Telephone Company alone accounted for 70.1% of the revenues and served 67.2% of the access lines. General Telephone Company accounted for another 16.2% of the total revenues and served 14.9% of the access lines.

TABLE 16

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN TELEPHONE UTILITIES
1982-1980

	1982	1981	1980
Operating Revenues			
Exchange Service Revenue	$ 585,717,996	$ 514,355,505	$448,392,456
Toll Service Revenue	609,469,433	546,266,457	460,724,547
Miscellaneous Operating Revenue	69,559,178	61,875,034	57,650,593
Total Operating Revenues	$1,264,746,607	$1,122,496,996	$966,767,596
Operating Expenses			
Maintenance Expense	$ 240,417,976	$ 204,274,247	$169,603,320
Traffic Expense	47,062,225	41,708,240	40,245,988
Commercial Expense 1/	129,738,806	108,364,270	93,972,705
General and Miscellaneous Expense	178,244,414	145,932,222	133,326,242
General Services and Licenses	19,459,881	20,313,970	13,280,219
Total Operation and Maintenance	$ 614,923,302	$ 520,592,949	$450,428,474
Depreciation and Amortization	216,718,134	189,654,458	176,666,078
Taxes Other than Income Taxes	118,522,678	103,732,334	82,030,752
Income Taxes	107,199,342	98,718,534	75,412,454
Total Operating Expenses	$1,057,363,456	$ 912,698,275	$784,537,758
Net Operating Revenue	$ 207,383,151	$ 209,798,721	$182,229,838

1/ Includes uncollectible bills.

TABLE 17

CUSTOMER EXCESS LINES SERVED BY WISCONSIN
TELEPHONE COMPANIES
December 31, 1982

	December 31, 1982
Residential	1,701,716
Business 1/	434,865
Miscellaneous 2/	26,982
Total Customer Access Lines	2,163,563

1/ Includes pay and mobile lines.

2/ Includes foreign exchange in and other common carrier connections.

TABLE 18

A SUMMARY OF 1982 OPERATIONS

FOR INDIVIDUAL TELEPHONE UTILITIES

UTILITY	OPERATING REVENUE	OPERATION AND MAINTENANCE	DEPN. AND AMORT.	TAXES OTHER THAN INCOME TAXES	INCOME TAXES	TOTAL OPERATING EXPENSE	NET OPERATING REVENUE	ACCESS LINES - CLOSE OF YEAR
AMERY TELEPHONE COMPANY	1,721,891	650,636	435,096	148,819	153,510	1,388,060	333,831	4,220
AMHERST TELEPHONE COMPANY	1,316,789	368,602	433,666	108,375	57,098	967,741	349,047	2,984
BADGER STATE TELEPHONE COMPANY, INC	1,528,055	714,347	371,569	125,087	64,807	1,275,810	252,245	3,638
BALDWIN TELEPHONE EXCHANGE	942,602	348,786	215,865	77,345	76,609	718,605	223,997	2,413
BAYLAND TELEPHONE INC	364,463	187,636	143,196	25,569	-5,889	350,512	13,951	1,087
BELMONT TELEPHONE COMPANY	246,411	113,179	52,619	12,253	6,868	184,920	61,491	683
BERGEN TELEPHONE COMPANY	62,702	37,097	12,348	2,473	3,231	55,148	7,553	150
BLACK EARTH TELEPHONE COMPANY	347,733	188,906	61,571	22,480	24,329	297,286	50,447	983
BLOOMER TELEPHONE COMPANY	637,025	223,781	156,187	48,700	66,214	494,882	142,143	2,418
BONDUEL TELEPHONE COMPANY	456,363	270,808	98,991	29,860	16,723	416,381	39,982	1,344
BRUCE TELEPHONE COMPANY, INC	637,029	199,317	112,833	49,789	32,741	394,680	242,349	1,192
BURLINGTON BRIGHTON & WHEATLAND TE	920,373	475,675	170,715	69,406	53,615	769,411	150,962	2,427
CASCO TELEPHONE COMPANY	327,416	165,740	114,649	21,127	-12	301,504	25,912	939
CENCOM OF WISCONSIN, INC	7,086,729	3,258,171	1,539,476	669,720	320,619	5,787,986	1,298,743	15,324
CENTRAL STATE TELEPHONE COMPANY	3,187,092	1,277,672	694,940	263,993	240,252	2,476,858	710,233	6,099
CENTURY TELEPHONE OF WIS, INC	21,595,927	9,133,311	4,420,120	1,957,060	2,142,947	17,653,439	3,942,488	38,982
CHEQUAMEGON TELEPHONE COOP INC	2,589,562	1,004,547	673,919	237,810	0	1,916,276	673,286	4,882
CHIBARDUN TELEPHONE COOPERATIVE IN	1,523,876	677,052	537,401	132,547	0	1,347,000	176,875	4,136
CITIZENS TELEPHONE COOPERATIVE INC	401,969	165,409	116,023	22,799	0	304,231	97,738	1,470
CLEAR LAKE TELEPHONE COMPANY, INC	395,043	207,633	95,867	27,018	5,419	335,936	59,107	1,056
COCHRANE COOPERATIVE TELEPHONE CO	286,620	122,366	89,547	18,171	0	230,084	56,536	973
COON VALLEY FARMERS TELEPHONE CO	345,375	172,408	92,102	21,107	8,283	293,901	51,474	1,742
CRANDON TELEPHONE COMPANY	748,959	354,091	222,587	62,587	-11,011	628,253	120,706	1,973
CUBA CITY TELEPHONE EXCHANGE COMPA	621,086	249,792	149,464	47,112	36,199	482,567	138,518	1,381
DICKEYVILLE TELEPHONE CORPORATION	316,527	150,960	74,370	17,425	4,610	247,365	69,163	873
DODGE COUNTY TELEPHONE COMPANY	306,304	190,475	73,373	19,302	1,095	284,246	22,059	855
FAIRWATER BRANDON ALTO TELEPHONE C	427,990	194,865	92,577	29,513	15,627	332,582	95,408	1,084
FARMERS INDEPENDENT TELEPHONE CO	694,042	251,358	149,646	51,934	79,115	532,053	161,988	2,001
FARMERS TELEPHONE COMPANY	1,865,419	650,438	496,919	163,154	150,594	1,461,106	404,312	4,950
FENNIMORE TELEPHONE COMPANY	656,245	306,210	174,312	48,063	13,065	541,650	114,595	1,474
FOOTVILLE TELEPHONE COMPANY	331,686	149,221	98,560	24,760	-755	271,786	59,901	745
FORESTVILLE TELEPHONE COMPANY, INC	560,198	232,734	124,648	33,569	74,383	465,333	94,866	1,639
GENERAL TELEPHONE COMPANY OF WISC	204,512,758	81,862,000	50,409,874	18,851,882	16,812,073	167,935,829	36,576,929	322,239
GREENWOOD TELEPHONE COMPANY	455,943	243,356	94,782	29,892	32,271	400,301	55,642	1,266
HAGER CITY TELEPHONE COMPANY	595,594	298,544	190,373	44,563	-2,449	531,030	64,563	1,438

TABLE 18 (CONTINUED)

UTILITY	OPERATING REVENUE	OPERATION AND MAINTENANCE	DEPN. AND AMORT.	TAXES OTHER THAN INCOME TAXES	INCOME TAXES	TOTAL OPERATING EXPENSE	NET OPERATING REVENUE	ACCESS LINES - CLOSE OF YEAR
HEADWATERS TELEPHONE COMPANY	2,214,955	643,369	639,896	196,126	91,782	1,571,173	643,782	3,311
HILLSBORO TELEPHONE COMPANY INC	520,743	237,174	154,583	37,479	3,653	432,888	87,854	1,351
INDIANHEAD TELEPHONE CO.	881,520	281,593	232,395	75,252	96,737	685,977	195,543	1,457
LA VALLE TELEPHONE COOPERATIVE, IN	398,636	207,038	106,481	25,059	0	338,578	60,058	1,310
LAKEFIELD TELEPHONE COMPANY	458,587	175,439	145,786	29,573	-2,508	348,290	110,298	1,149
LAKESHORE TELEPHONE COMPANY	506,420	256,606	135,260	38,930	8,944	439,740	66,680	1,314
LARSEN-READFIELD TELEPHONE COMPANY	718,113	348,888	156,551	55,172	56,803	617,414	100,699	1,759
LEMONWEIR VALLEY TELEPHONE COMPANY	1,304,126	323,249	290,522	114,819	185,566	914,157	389,969	2,184
LUCK TELEPHONE COMPANY	522,187	185,155	124,935	38,118	50,133	398,340	123,847	1,591
MADELINE ISLAND TELEPHONE COMPANY	78,841	61,967	10,307	4,202	-144	76,332	2,509	279
MANAWA TELEPHONE COMPANY, INC	773,001	318,762	195,322	59,293	53,578	626,955	146,046	1,687
MAPLE TELEPHONE COOPERATIVE, INC	85,159	30,041	13,727	4,343	0	48,110	37,049	276
MARQUETTE ADAMS TELEPHONE COOP INC	847,945	304,534	244,087	70,715	0	619,336	228,609	2,246
MID-PLAINS TELEPHONE INCORPORATED	6,102,208	1,853,464	1,276,897	562,348	738,625	4,431,334	1,670,874	11,624
MIDWAY TELEPHONE COMPANY	2,876,818	1,004,934	638,226	237,252	292,260	2,172,671	704,147	5,496
MILLTOWN MUTUAL TELEPHONE COMPANY	527,795	221,685	170,933	41,026	4,382	438,026	89,769	1,543
MONDOVI TELEPHONE COMPANY	793,354	411,305	192,422	63,095	-6,298	660,524	132,830	1,967
MONROE COUNTY TELEPHONE COMPANY	3,582,915	1,638,758	863,345	340,421	99,004	2,941,529	641,386	7,549
MOSEL CENTERVILLE TELEPHONE COMPAN	1,195,300	582,717	302,302	91,622	53,727	1,030,368	164,931	2,588
MOSINEE TELEPHONE COMPANY	1,008,855	538,997	323,834	94,264	-13,357	943,739	65,116	3,149
MOUNT HOREB TELEPHONE COMPANY	861,358	417,003	162,609	65,810	13,911	659,333	202,025	2,457
MOUNT VERNON TELEPHONE COMPANY	2,001,646	862,697	479,167	169,705	145,260	1,656,829	344,817	4,100
NELSON TELEPHONE COOPERATIVE	1,267,702	585,136	412,509	106,809	0	1,104,454	163,248	3,142
NIAGARA TELEPHONE COMPANY	1,228,578	508,793	256,576	114,706	59,628	939,702	288,876	2,743
NORTH-WEST TELEPHONE COMPANY	23,306,224	8,968,572	5,745,315	2,193,492	1,045,056	17,952,434	5,353,790	46,912
NORTHEAST TELEPHONE COMPANY	1,393,161	534,854	365,867	107,828	79,574	1,088,123	305,038	3,953
NOVYS TELEPHONE COMPANY	128,631	59,192	22,151	7,154	0	88,497	40,134	506
PEOPLES TELEPHONE CO (MOUNT HOPE)	624,269	306,440	132,368	35,865	52,288	526,962	97,307	1,577
PEOPLES TELEPHONE CO OF RANDOLPH	1,642,614	730,514	398,254	147,602	95,562	1,371,931	270,683	5,201
PLATTEVILLE TELEPHONE COMPANY	4,513,153	1,719,335	951,117	447,214	377,237	3,494,903	1,018,249	6,882
PRICE COUNTY TELEPHONE COMPANY	1,397,366	461,084	364,928	127,650	97,526	1,051,188	346,178	2,946
RHINELANDER TELEPHONE COMPANY	3,433,860	1,498,192	852,198	320,889	164,486	2,835,766	598,094	9,901
RIB LAKE TELEPHONE COMPANY	321,423	152,722	75,549	21,985	10,702	260,957	60,466	983
RICHLAND GRANT TELEPHONE COOPERATI	712,358	386,268	180,441	52,551	0	619,260	93,099	2,134
ROCK RIVER TELEPHONE COMPANY	548,370	330,676	121,795	39,260	-294	491,437	56,933	1,303

TABLE 18 (CONTINUED)

UTILITY	OPERATING REVENUE	OPERATION AND MAINTENANCE	DEPN. AND AMORT.	TAXES OTHER THAN INCOME TAXES	INCOME TAXES	TOTAL OPERATING EXPENSE	NET OPERATING REVENUE	ACCESS LINES - CLOSE OF YEAR
SCANDINAVIA TELEPHONE COMPANY	818,597	324,959	234,935	58,717	45,724	664,335	154,262	1,636
SHARON TELEPHONE COMPANY	309,218	187,560	49,514	27,070	9,870	274,014	35,203	869
SHELL LAKE TELEPHONE COMPANY	589,287	244,069	160,511	47,877	37,968	490,426	98,861	1,650
SIREN TELEPHONE COMPANY INCORPORAT	480,416	202,759	98,856	35,091	53,256	389,963	90,454	1,411
SOLON SPRINGS TELEPHONE COMPANY	5,047,178	2,045,110	986,725	451,548	596,710	4,080,093	967,085	11,671
SOMERSET TELEPHONE COMPANY, INC	384,930	158,396	58,937	27,750	39,316	284,399	100,531	958
SOUTHEAST TELEPHONE CO OF WISC, IN	2,005,976	727,980	440,882	177,925	122,949	1,469,735	536,241	4,683
SPRING VALLEY TELEPHONE COMPANY, I	260,566	135,509	40,073	15,003	16,146	206,730	53,835	775
ST CROIX TELEPHONE COMPANY	1,817,560	577,480	508,566	184,434	112,394	1,382,874	434,686	4,357
STATE LONG DISTANCE TELEPHONE CO	2,566,303	1,101,922	577,059	241,104	217,712	2,137,797	428,506	4,979
STOCKBRIDGE & SHERWOOD TELEPHONE C	843,099	433,672	227,619	57,209	35,714	754,215	88,885	1,979
SULLIVAN TELEPHONE COMPANY	478,267	195,326	118,450	34,621	38,433	386,830	91,437	1,424
TENNEY TELEPHONE COMPANY	287,839	118,558	59,364	19,254	20,522	217,697	70,141	847
THORP TELEPHONE COMPANY	858,928	405,672	149,785	74,541	56,521	686,519	172,409	1,871
TRI-COUNTY TELEPHONE COOP, INC	1,095,220	580,466	318,530	89,833	0	988,829	106,391	3,179
TURTLE LAKE TELEPHONE COMPANY INC	419,806	172,471	89,301	29,410	19,001	310,184	109,622	992
UNION TELEPHONE COMPANY	1,027,417	430,122	281,573	85,367	-2,158	794,904	232,513	2,951
UNITED TELEPHONE COMPANY	5,562,049	3,910,143	1,782,701	561,767	-29,432	6,225,179	-663,130	10,144
UNIVERSAL TEL CO OF NORTHERN WIS I	4,249,218	1,578,891	870,591	364,548	585,207	3,399,237	849,981	9,846
URBAN TELEPHONE CORPORATION	5,244,409	2,235,887	1,010,121	504,961	487,489	4,238,458	1,005,950	15,292
VALDERS TELEPHONE COMPANY	699,806	398,604	154,119	45,253	22,664	620,640	79,166	1,732
VERNON TELEPHONE COOPERATIVE	1,439,670	760,877	431,152	124,099	0	1,316,128	123,542	5,023
VIROQUA TELEPHONE COMPANY	1,696,477	905,154	343,725	172,385	94,413	1,515,677	180,799	2,838
WAUNAKEE TELEPHONE COMPANY INC	1,192,998	573,312	273,161	90,264	55,295	992,032	200,966	2,794
WAYSIDE TELEPHONE COMPANY	351,825	193,571	88,495	26,098	1,323	309,487	42,338	1,106
WEST WISCONSIN TELEPHONE COOP, INC	1,381,304	575,700	449,900	120,040	0	1,145,641	235,663	3,083
WEYAUWEGA TELEPHONE COMPANY	970,188	531,848	215,824	72,354	18,165	838,192	131,997	3,261
WISCONSIN TELEPHONE COMPANY	886,189,549	459,091,474	124,960,065	84,312,596	79,587,828	747,951,963	138,237,586	1,453,130
WITTENBERG TELEPHONE COMPANY	479,791	264,601	104,953	34,466	-1,292	402,729	77,062	1,639
WOOD COUNTY TELEPHONE COMPANY	8,206,733	3,616,935	1,903,806	784,196	631,601	6,936,538	1,270,195	17,813
TOTAL	1,264,746,607	614,923,302	216,718,134	118,522,678	107,199,342	1,057,363,456	207,383,151	2,163,563

WATER UTILITIES

Comparative statistics of water utilities operating in Wisconsin during the period from 1980 through 1982 are presented in this section. Chart 17 shows a summary of the income account over a ten-year period. The coverage is summarized below:

Table 19 - Comparative Statement of Revenues and Expenses Wisconsin Water Utilities, 1982-1980.
Table 20 - Operating and Plant Statistics, Wisconsin Water Utilities, 1982-1980.
Table 21 - Condensed summary of 1982 Operations, Individual Water Utilities

Chart 17 - Comparison of Revenues and Expenses, Wisconsin Water Utilities, 1973-1982.

Water Utility Revenues and Expenses

Chart 17 shows that revenues and expenses (with the exception of taxes) have advanced steadily over the past nine years. Taxes are up only 16% for the period while operation and maintenance expenses are up 148%, depreciation rose 90%, operating revenues rose 99% and net operating revenue increased 55%.

Revenues increased 9.6% and operating expenses were up 9.7% during 1982. Net operating revenue increased 9.0%.

Operating and Plant Statistics

The total number of water customers served increased 1.4% in 1982 while gallons of water pumped were down 9.7%. Electric pumpage accounted for 99.9% of the total and the remainder was by internal combustion engines. Total miles of main increased 1.3%.

Data on Individual Utilities

Table 21 shows selected data on each Class A and B water utility, all but two of which are municipally owned. The table also shows totals for the smaller utilities. Municipal utilities accounted for 96.3% of the total operating revenue and served 97.1% of the customers. Superior, served by Superior Water, Light, and Power Company, and Beloit and Ripon served by Wisconsin Power and Light Company, were the largest cities served by private utilities.

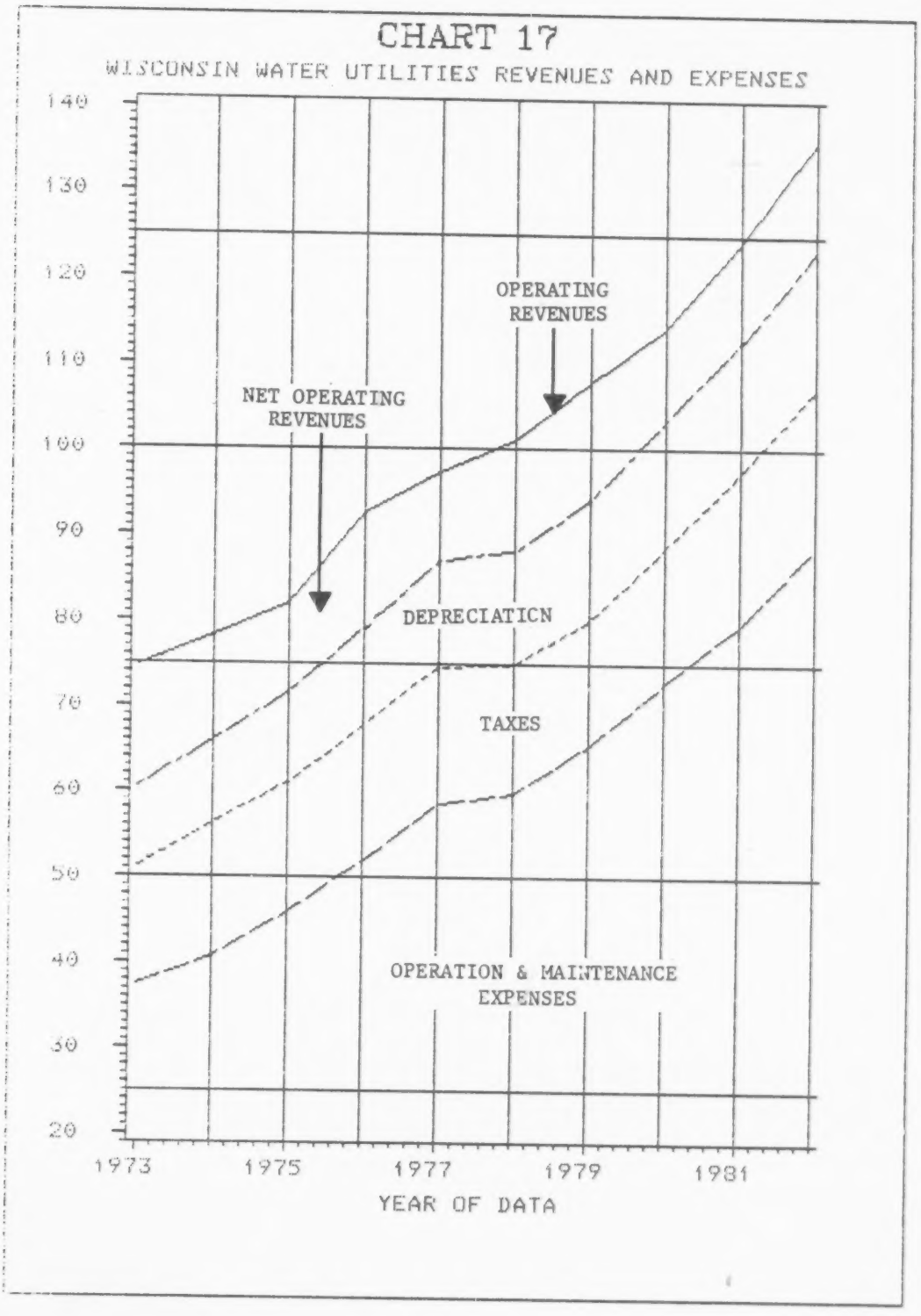


CHART 17
WISCONSIN WATER UTILITIES REVENUES AND EXPENSES
140
130
120
110
100
90
80
70
60
50
40
30
20
OPERATING REVENUES
NET OPERATING REVENUES
DEPRECIATICN
TAXES
OPERATION & MAINTENANCE EXPENSES
1973
1975
1977
1979
1981
YEAR OF DATA

TABLE 19

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN WATER UTILITIES
1982-1980

	1982	1981	1980
All Water Utilities			
Operating Revenues			
Sales to General Consumers	$ 98,300,045	$ 90,293,392	$ 83,085,455
Interdepartmental Sales	65,460	72,289	67,684
Sales to Other Water Utilities	3,564,898	3,211,017	3,226,943
Fire Protection and Other Municipal Sales	31,357,345	28,272,720	25,914,631
Total Sales of Water	$133,287,748	$121,849,418	$112,294,713
Miscellaneous Operating Revenues	2,850,780	2,351,771	1,898,737
Total Operating Revenues	$136,138,528	$124,201,189	$114,193,450
Operating Expenses			
Source of Water Supply (Excluding Purchases)	$ 1,920,941	$ 818,390	$ 1,084,458
Water Purchases	3,716,243	3,644,040	3,786,508
Pumping Expenses	22,840,075	20,091,605	18,301,855
Purification	12,034,928	11,515,933	10,278,810
Total Production Expense	$ 40,512,187	$ 36,069,968	$ 33,451,631
Transmission and Distribution	23,234,904	20,350,067	18,415,705
Customer Accounts	6,190,109	5,881,333	5,096,049
Sales	210	18,258	14,143
Administrative and General Expenses	18,539,049	17,149,274	15,765,632
Total Operation and Maintenance Expense	$ 88,476,459	$ 79,468,900	$ 72,743,160
Depreciation and Amortization	16,467,982	15,397,080	14,698,339
Taxes Other than Income Taxes	18,278,580	17,408,053	15,568,767
Income Taxes	207,414	268,800	123,135
Total Operating Expenses	$123,430,435	$112,542,833	$103,133,401
Net Operating Revenues	$ 12,708,093	$ 11,658,356	$ 11,060,049

TABLE 19 (Concluded)

COMPARATIVE STATEMENT OF REVENUES AND EXPENSES
WISCONSIN WATER UTILITIES
1982-1980

	1982	1981	1980
Private Water Utilities			
Total Operating Revenues	$ 5,068,419	$ 4,854,937	$ 4,191,898
Operation and Maintenance	$ 3,021,732	$ 2,801,399	$ 2,429,171
Depreciation and Amortization	527,814	445,937	387,859
Taxes Other than Income Taxes	386,141	367,499	317,389
Income Taxes	287,414	268,865	223,175
Total Operating Expenses	$ 4,142,901	$ 3,983,500	$ 3,357,594
Net Operating Revenues	$ 925,518	$ 871,482	$ 668,752
Municipal Utilities			
Total Operating Revenues	$121,498,109	$110,367,151	$110,891,569
Operation and Maintenance	$ 85,454,727	$ 78,567,191	$ 79,116,587
Depreciation and Amortization	15,948,369	14,952,343	14,159,489
Taxes Other than Income Taxes	17,882,439	17,648,644	16,251,187
Total Operating Expenses	$119,287,534	$110,568,178	$ 99,238,263
Net Operating Revenues	$ 11,802,575	$ 10,798,974	$ 10,193,287

TABLE 20

OPERATING AND PLANT STATISTICS
WISCONSIN WATER UTILITIES
1982-1980

	1982	1981	1980
Average Number of Customers			
Residential	835,650	826,192	827,896
Commercial	88,741	85,746	84,537
Industrial	7,256	7,230	7,330
Total	931,647	919,168	919,763
Private Utilities	26,943	27,451	27,290
Municipal Utilities	904,704	891,717	892,473
Total	931,647	919,168	919,763
Gallons of Water Pumped Into Distribution System (000 Omitted)			
Electric	181,521,197	201,094,484	203,041,410
Internal Combustion	4,696	20,686	4,370
Steam	0	1,125	1,375
Total	181,525,893	201,116,295	203,047,155
Private Utilities	4,439,291	5,226,616	5,088,672
Municipal Utilities	177,086,602	195,889,679	197,958,483
Total	181,525,893	201,116,295	203,047,155
Miles of Distribution Main on December 31			
Private Utilities	363	363	368
Municipal Utilities	13,401	13,228	13,197
Total	13,764	13,591	13,311

TABLE 21

CONDENSED SUMMARY OF 1982 OPERATIONS
INDIVIDUAL WATER UTILITIES

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Income Taxes	Total Operating Expenses	Net Operating Revenues	Average Number of Customers 1/
Private Utilities								
Class A & B								
Superior Water, Light & Power Co. (SWLP)	$ 1,702,824	$ 1,241,025	$ 155,780	$ 151,563	$ (72,437)	$ 1,475,931	$ 226,893	9,541
Wisconsin Power & Light Co. (WPL)	3,110,119	1,617,318	337,259	219,946	277,331	2,451,854	658,265	15,808
Subtotal	$ 4,812,943	$ 2,858,343	$ 493,039	$ 371,509	$ 204,894	$ 3,927,785	$ 885,158	25,349
12 Class D Water Utilities 2/	$ 235,476	$ 163,389	$ 34,575	$ 14,632	$ 2,520	$ 215,116	$ 20,360	1,810
Total Private Utilities	$ 5,048,419	$ 3,021,732	$ 527,614	$ 386,141	$ 207,414	$ 4,142,901	$ 905,518	27,159
Municipal Utilities								
Class A								
Appleton	$ 2,781,218	$ 2,022,164	$ 246,474	$ 292,328	$ 0	$ 2,560,966	$ 220,252	19,877
Cudahy	1,004,905	618,854	121,578	146,654	0	887,086	117,819	5,147
Eau Claire	2,384,908	1,277,860	250,683	289,471	0	1,818,014	566,894	16,316
Fond du Lac	948,836	962,818	101,013	141,216	0	1,205,047	(256,211)	12,187
Glendale	818,753	521,431	114,068	97,040	0	732,539	86,214	4,372
Green Bay	3,836,863	1,978,398	414,245	406,648	0	2,799,291	1,037,572	28,854
Janesville	822,621	814,351	141,799	202,308	0	1,158,458	(335,837)	16,618
Kaukauna	393,420	325,760	65,908	75,992	0	467,660	(74,240)	3,801
Kenosha	3,430,689	2,150,461	365,074	421,673	0	2,937,208	493,481	22,944
La Crosse	1,546,105	1,214,137	152,110	186,047	0	1,552,294	(6,189)	14,839
Madison	6,143,826	3,884,349	630,957	790,010	0	5,305,316	838,510	45,530
Manitowoc	1,465,596	869,008	175,321	191,263	0	1,235,592	230,004	10,905
Marinette	726,212	467,029	82,301	99,886	0	649,216	76,996	4,441
Marshfield	711,051	435,903	78,897	73,103	0	587,903	123,148	5,932
Milwaukee	27,400,283	18,891,843	2,597,335	4,149,501	0	25,638,679	1,761,604	158,251
Neenah	1,048,296	726,181	123,167	134,556	0	983,904	64,392	7,975
Oshkosh	1,768,026	1,164,327	179,694	219,614	0	1,563,635	204,391	16,526
Racine	4,075,393	2,739,155	443,158	451,043	0	3,633,356	442,037	28,066
Sheboygan	1,463,335	1,163,878	158,512	223,761	0	1,546,151	(82,816)	16,337
South Milwaukee	738,749	601,537	61,373	101,972	0	764,882	(26,133)	5,852
Waukesha	3,060,279	1,849,309	326,644	318,880	0	2,494,833	565,446	12,764
Wausau	1,474,963	888,702	156,232	163,054	0	1,207,988	266,975	11,420
Wauwatosa	2,427,199	1,684,516	173,690	315,385	0	2,173,591	253,608	15,555
West Allis	2,574,527	2,256,671	201,772	363,690	0	2,822,133	(247,606)	19,104
Wisconsin Rapids	1,009,410	718,821	95,621	169,013	0	983,455	25,955	6,640
Subtotal	$74,055,463	$50,227,463	$7,457,626	$10,024,108	$ 0	$67,709,197	$6,346,266	510,253

TABLE 21 (Concluded)

CONDENSED SUMMARY OF 1982 OPERATIONS
INDIVIDUAL WATER UTILITIES

Utilities	Operating Revenues	Operation and Maintenance	Depreciation and Amortization	Taxes Other Than Income Taxes	Income Taxes	Total Operating Expenses	Net Operating Revenues	Average Number of Customers 1/
Municipal Utilities (Continued)								
Class B								
Allouez	$ 584,910	$ 399,268	$ 70,400	$ 56,329	$ 0	$ 525,997	$ 58,913	4,654
Ashland	504,105	387,137	36,255	58,168	0	481,560	22,545	2,850
Beaver Dam	498,798	361,533	62,038	60,330	0	483,901	14,897	5,217
Brown Deer	576,008	384,469	87,765	94,586	0	566,820	9,188	3,296
Cedarburg	323,490	218,732	35,729	49,385	0	303,846	19,644	2,644
Chippewa Falls	641,133	443,468	69,915	103,905	0	617,288	23,845	4,045
De Pere	402,379	325,465	60,445	83,174	0	469,084	(66,705)	4,413
Greendale	549,668	416,909	48,993	76,014	0	541,916	7,752	4,532
Menasha, Twn. S.D. #4	886,538	596,361	104,321	10,922	0	711,604	174,934	3,736
Menasha, City	1,092,648	885,414	84,937	119,120	0	1,089,471	3,177	4,875
Menomonee Falls	740,997	439,852	107,902	130,400	0	678,154	62,843	4,769
New Berlin	937,087	418,890	149,175	195,821	0	763,886	173,201	3,252
New London	263,015	133,152	25,128	30,244	0	188,524	74,491	2,256
Oak Creek	1,221,161	563,102	285,709	257,169	0	1,105,980	115,181	3,047
Oconomowoc	608,181	276,815	72,097	82,032	0	430,944	177,237	3,123
Platteville	550,590	331,307	76,854	57,305	0	465,466	85,124	2,559
Plymouth	265,275	253,368	19,331	29,899	0	302,598	(37,323)	2,136
Port Washington	629,688	434,272	70,633	89,915	0	594,820	34,868	2,817
River Falls	271,536	181,711	24,105	31,717	0	237,533	34,003	2,196
Shawano	357,419	149,423	37,557	35,289	0	222,269	135,150	2,850
Shorewood	407,538	412,572	16,403	24,344	0	453,319	(45,781)	3,544
Stevens Point	701,690	412,674	71,423	111,926	0	596,023	105,667	6,713
Sturgeon Bay	729,224	326,642	107,969	106,549	0	541,160	188,064	3,063
Sun Prairie	404,635	272,920	45,636	56,454	0	375,010	29,625	3,722
Two Rivers	621,141	412,380	62,126	71,570	0	546,076	75,065	4,604
Waterloo	72,581	59,524	7,854	9,137	0	76,515	(3,934)	940
Watertown	574,825	407,176	72,716	69,621	0	549,513	25,312	5,670
Waupaca	350,034	156,669	50,412	43,943	0	251,024	99,010	1,703
Waupun	398,725	300,276	36,246	35,024	0	371,546	27,179	2,713
West Bend	715,821	491,045	103,681	125,891	0	720,617	(4,796)	6,257
Whitefish Bay	422,956	264,121	60,794	40,948	0	365,863	57,093	4,776
Subtotal	$17,303,796	$11,116,647	$2,164,549	$ 2,347,131	$ 0	$15,628,327	$ 1,675,469	112,972
Class C 124 Utilities	25,025,413	15,329,718	3,613,306	3,385,103	0	22,328,127	2,697,286	175,998
Class D 357 Utilities	14,705,437	8,780,899	2,704,887	2,136,097	0	13,621,883	1,083,554	117,773
Total Municipal Utilities	$131,090,109	$85,454,727	$15,940,368	$17,892,439	$ 0	$119,287,534	$11,802,575	916,996
Total All Utilities	$136,138,528	$88,476,459	$16,467,982	$18,278,580	$207,414	$123,430,435	$12,708,093	944,155

1/ Includes fire protection, public authorities, interdepartmental and other water utility customers.
2/ There were no Private Class C utilities in 1981.
3/ ( ) Denotes negative figure.

STEAM AND HOT WATER HEATING UTILITY SUMMARY

As shown in Table 22, steam and hot water heating utility operations in Wisconsin are not very extensive. Only three utilities rendered this service in 1982.

The Wisconsin Electric Power Company, operating in the city of Milwaukee, has by far the largest heating utility in the State, serving 543 customers at the close of 1982. Its net operating revenue for the year was $1,576,859.

Other communities in which heating service was supplied during the year included Waterloo, served by a municipal utility, and Rice Lake, served by Rice Lake Steam Corporation. Rice Lake showed a gain of $6,252 while Waterloo had a loss of $13,427 for 1982.

TABLE 22

COMPARATIVE STATEMENT OF REVENUES, EXPENSES
AND STATISTICS FOR WISCONSIN STEAM AND HOT WATER
HEATING UTILITIES
1982-1980

	1982	1981	1980
Operating Revenues	$11,461,606	$9,864,032	$8,664,808
Operation and Maintenance	$ 7,938,268	$7,142,717	$6,502,781
Depreciation	746,188	589,416	653,276
Taxes	1,207,466	883,575	538,766
Total Operating Expenses	$ 9,891,922	$8,615,708	$8,262,041
Net Operating Revenues	$ 1,569,684	$1,248,324	$ 969,985
Number of Customers	703	712	726